



**Edward L. Reinhardt**  
President

March 16, 2009

The Honorable Chairman and Members of the  
Hawaii Public Utilities Commission  
Kekuanaoa Building, 1st Floor  
465 South King Street  
Honolulu, Hawaii 96813

FILED  
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PUBLIC UTILITIES  
COMMISSION

Dear Commissioners:

Subject: Docket No. 2006-0387  
MECO 2007 Test Year Rate Case  
Calibration Factor Annual Report for Year 2008

Enclosed for filing is Maui Electric Company, Limited's ("MECO") annual calibration factor report for year 2008. This report is filed in accordance with the Stipulated Settlement Letter executed by MECO and the Division of Consumer Advocacy in this proceeding. The Stipulated Settlement Letter, filed with the Commission on December 7, 2007, states in paragraph 7 of Exhibit 1: "MECO agrees to file annual reports on its calibration factor."

Please call Dean Matsuura at 543-4622 if you have any questions regarding the enclosed report.

Sincerely,

*Edward L. Reinhardt*

Enclosure

cc: Division of Consumer Advocacy  
Peter Y. Kikuta, Esq.  
Thomas W. Williams, Jr., Esq.



**Maui Electric Company, Limited**  
**Annual Calibration Factor Report for Year 2008**  
**March 16, 2009**

## 1.0 Introduction

This document provides to the Hawaii Public Utilities Commission ("Commission") and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs ("Consumer Advocate") the calibration factors for year 2008 in accordance with the Commission's Interim Decision & Order No. 23926 (filed December 21, 2007) and the stipulated settlement agreement in Docket No. 2006-0387, Maui Electric Company, Limited ("MECO") Test Year 2007 Rate Case. The calibration factor applies only to the Maui Division, as the Molokai and Lanai Divisions did not use production simulations in Docket No. 2006-0387 to determine system fuel consumption. Rather, system fuel consumption for the Molokai and Lanai Divisions was determined by using the estimated test year system heat rate derived from the average system heat rate over the five-year (2001-2005) period multiplied by the test year generation required to serve the load.

As discussed further below, the calibration factors for year 2008, based on recorded January through December 2008 data, are 1.036 system-wide, 1.034 for industrial fuel oil, and 1.037 for diesel fuel. The calibration factors previously calculated for MECO's 2007 Calibration Factor Report were 1.023 system-wide, 1.039 for industrial fuel oil, and 1.026 for diesel.

## 2.0 Background

### 2.1 Calibration Factor

The purpose of a calibration factor in the context of a rate case is to adjust the fuel consumption determined by a computer production simulation to account for actual operating conditions that are not accurately simulated by the computer model. The calibration factor is a constant number that can be greater than, equal to, or less than 1.00. The test year fuel consumption (in Btus) determined by the production simulation is multiplied by this factor.

### 2.2 Calibration Factor Issue

In HELCO's Test Year 2000 rate case, Docket No. 99-0207, HELCO used a revised calibration factor of 1.027 based on a calibration to 1999 actual production statistics. The calibration factor is a necessary adjustment to the results of the production simulation model to reflect the actual operation of the generating units in the real world. The Consumer Advocate opposed the use of a calibration factor. HELCO's position is set forth in its Opening Brief filed October 25, 2000 (pages 122-127) and



Reply Brief filed December 4, 2000 (pages 75-77) in Docket No. 99-0207, and the Consumer Advocate's position is set forth in its Opening Brief filed October 25, 2000 (pages 101-105) and Reply Brief filed December 4, 2000 (pages 40-43) in Docket No. 99-0207.

In its Decision & Order ("D&O") No. 18365, issued on February 8, 2001, on pages 18-19, in Docket No. 99-0207, the Commission ordered HELCO to file annual reports on HELCO's calibration factor.

### 2.3 Stipulated Settlement Letter for MECO Rate Case

In MECO's Test Year 2007 Rate Case in Docket No. 2006-0387, the Consumer Advocate stated in CA-T-2, page 20, "...I recommend that the Commission continue to require MECO, and the other utilities under its jurisdiction, to provide annual calibration reports."

In a Stipulated Settlement Letter from MECO and the Consumer Advocate (collectively referred to as the "Parties") submitted to the Commission on December 7, 2007, in Docket No. 2006-0387, the Parties agreed that MECO will file annual reports on MECO's calibration factor. As stated on pages 6 and 7 of the Stipulated Settlement Letter, "The Consumer Advocate recommended, however, that MECO continue to be required to provide annual calibration reports to allow the Commission and Consumer Advocate an opportunity to monitor the difference between the estimated and actual results produced from the use of the production simulation model. MECO agrees to file annual reports on its calibration factor".

This report is being filed in accordance with the Parties' Stipulated Settlement Letter and covers the 2008 calibration year.

## 3.0 Determination of the Calibration Factor - Analytical Methodology

A calibration factor is determined by using a computer model to simulate the operation of the utility production system for a recorded year, called the "calibration year," and determining the ratio between the computer model outputs and recorded amounts for the calibration year.

### 3.1 Production Simulation

MECO uses a computer model, called P-MONTH, supplied by the P Plus Corporation ("PPC"), to perform the production simulation. This model simulates the chronological, hour-by-hour operation of MECO's generation system by dispatching (i.e., mathematically allocating) the forecasted hourly kilowatt load among the available generating units.



Generating units in the model are represented as thermal units and fixed and hourly purchased energy transactions. An output report produced by the production simulation model lists the fuel consumption in MBtus and the energy in GWh of each thermal unit by month.

### 3.1.1 Thermal units

The units modeled as thermal units in P-MONTH are all MECO-owned generators at the Kahului and Maalaea generating stations. Unit commitment for these thermal units was based on a typical MECO unit commitment order. Dispatch levels for these thermal units are based on how MECO dispatched the units from their Automatic Generation Control ("AGC") system, direct operator control, and the desire to equalize operating hours to maximize maintenance cycle efficiency. The model calculates the fuel consumed using the unit dispatch described above, based on the load carried by the unit and the unit's efficiency characteristics. The total fuel consumed hourly by the MECO system is the summation of each unit's hourly fuel consumption.

MECO also owns two emergency diesel generating units at the Hana Substation. These units are represented in P-MONTH as a fixed energy transaction due to their limited and infrequent use. Therefore, they are not included with the daily commitment and dispatch of other MECO generating units. The generation from the Hana Distributed Generation ("DG") units reduces the load that must be served by the central station and IPP generating units. In December 2008, MECO completed a communication and controls project that enables the Hana units to be operated as dispatchable distributed generation. The completion of this project provides MECO with the means to operate the Hana generators in parallel to the system and as emergency units.

### 3.1.2 Fixed Energy Transactions

MECO has an existing power purchase contract with Hawaiian Commercial & Sugar Company ("HC&S") to purchase up to 16 MW of firm generating capacity. This purchased power is represented in P-MONTH as a fixed energy transaction. In addition, MECO purchases as-available generation from two Independent Power Producers, Kaheawa Wind Power, LLC ("KWP") and Makila Hydro LLC, ("Makila"<sup>1</sup>). These as-available power producers, consisting of a wind farm and a run-of-river hydro unit, respectively, are represented in the P-MONTH model as

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<sup>1</sup> Makila Hydro was not operating for all of 2008. In 2006, Makila Hydro experienced equipment failure and became unavailable on October 15, 2006. Makila Hydro anticipates repairs to be completed in 2009 and resume energy production.



hourly purchase energy transactions. An energy transaction acts as a load modifier, which means that the load levels are reduced by the amount of energy that is produced and supplied by the generating facility to the utility.

The energy reduces the load levels before the utility thermal units are dispatched. Each transaction is represented by an average load level and actual MWh generated for each month. The average load level in each hour for each as-available unit is subtracted from the hourly system load profile in the model.

Wind farms and hydro units do not use fuel cost inputs and are not included in the total fuel consumption for the MECO system; therefore, they are not included in the calculation of the calibration factors.

#### 3.1.3 Simulation Options

P-MONTH has two simulation options: (1) probabilistic, and (2) Monte Carlo. For reasons put forward and explained in MECO's Test Year 2007 Rate Case, Docket No. 2006-0387, MECO T-4, page 33, line 15, to page 34, line 4, it was determined that the Monte Carlo technique is better able to simulate the actual operation of the system in the calibration year. Based on this evaluation, MECO used the Monte Carlo option in determining the calibration factor for this report.

#### 3.1.4 Calibration by Fuel Type

In addition to adopting the Monte Carlo option for this report, MECO also examined the ability of the model to capture the operation of the generating units by the two fuel types used by MECO – Industrial Fuel Oil (“IFO”) and diesel fuel. In 2008, approximately 19% of MECO's generation was provided by the use of IFO and 81% by diesel fuel.

For reasons put forward and explained in MECO's Test Year 2007 Rate Case, Docket No. 2006-0387, MECO T-4, page 33, lines 7-14, two calibration factors are being used, one for each fuel type.

### 3.2 Calibration Factor Calculation

The production simulation results for the calibration year are compared to the actual recorded data for the calibration year and a calibration factor is derived using actual and simulated fuel consumption, energy generated and unit heat rates. The following sections provide an explanation of how the actual and simulated, fuel consumption, energy generation and unit heat rates are used when calculating the calibration factor. Actual data are taken from MECO production reports, which are shown in Appendix



A, Page 75. Simulated data are taken from P-MONTH monthly and yearly output reports which are a result of the production simulation.

### 3.2.1 Fuel Consumption

Actual fuel consumption for each unit is recorded on MECO production reports in barrels of diesel fuel and IFO consumed by MECO generating units. The actual amount of diesel fuel consumed is converted to MBtus by multiplying the barrels consumed by the average MBtu content of 5.86 MBtu/barrel.<sup>2</sup> The actual amount of industrial fuel consumed is converted to MBtus by multiplying the barrels consumed by the average MBtu content of 6.3 MBtu/barrel.<sup>3</sup> The actual amount of fuel consumed by MECO units in MBtus is the sum of the diesel fuel consumed and the IFO consumed and is used in calculating the actual system-wide heat rate explained in section 3.2.3.

The yearly report from P-MONTH production simulation displays the simulated fuel, in MBtus, consumed by each unit. The simulated amount of fuel consumed by MECO units is calculated by summing the MBtus consumed by all MECO-owned fossil-fuel units and is used in the calculation of the system-wide calibration factor. This is explained in more detail in section 3.2.4.

### 3.2.2 Energy

The actual net energy in kWh generated by each unit is recorded on MECO production reports. The calibration factor calculation uses the total net kWh (converted into MWh) generated by MECO-owned units not including the Kaheawa Wind Farm, Makila Hydro generating units, the HC&S generating units, and the DG units at the Hana substation. An explanation of how the calibration factor calculation uses the total net energy generated by the MECO-owned units is provided in section 3.2.3.

The yearly report from the P-MONTH production simulation lists the total net GWh generated by each unit for the calibration year. The simulated net energy generated is calculated by summing the GWh generated by all MECO-owned units not including the Kaheawa Wind Farm, the Makila unit, the HC&S units, and the DG units at the Hana substation. The GWh are converted into MWh for the calibration factor calculation. An

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<sup>2</sup> Average MBtu content of 5.86 MBtu/bbl for diesel fuel is specified in the fuel delivery contracts with Chevron and Tesoro (MECO's two fuel suppliers). Fuel testing for MBtu content is done for each delivery to ensure specifications are adhered to by the fuel supplier.

<sup>3</sup> Average MBtu content of 6.3 MBtu/bbl for industrial fuel is specified in the fuel delivery contracts with Chevron and Tesoro (MECO's two fuel suppliers). Fuel testing for MBtu content is done for each delivery to ensure specifications are adhered to by the fuel supplier.



explanation of how the calibration factor calculation uses the simulated net energy generated by the MECO-owned units is explained in section 3.2.4.

### 3.2.3 Heat Rate

For the calibration factor calculation, the actual net heat rate using recorded values from the calibration year is calculated. The net heat rate, in Btu/kWh, is the fuel consumption divided by the total net energy and is used in calculating the calibration factor.

### 3.2.4 Calibration Factor

The calibration factor is the ratio between the actual heat rate and the simulated heat rate from the P-MONTH model for the calibration year. The simulated fuel consumption in MBtus from the production simulation (derived in section 3.2.1) is divided by the simulated net energy generated by the MECO-owned units from the production simulation (derived in section 3.2.2) to obtain the simulated heat rate. The actual heat rate is then divided by the simulated heat rate from the production simulation to obtain the calibration factor.

## 4.0 Results for Year 2008

The calibration factors for year 2008, based on recorded January through December 2008 data, are 1.036 system-wide, 1.034 for IFO generation and 1.037 for diesel fuel generation. The calibration factors previously calculated for MECO's 2007 Calibration Factor Report were 1.023 system-wide, 1.039 for industrial fuel oil, and 1.026 for diesel.

The worksheet showing the calculation of the 2008 Calibration Factor is shown in Table A-1 of Appendix A.

### 4.1 Specific Assumptions

The key inputs to the production simulation model, when applied to the MECO system, are as follows:

- energy and hourly load to be served by the MECO system,
- energy and hourly load to be served by firm and non-firm purchased power producers,
- load carrying capability of each MECO and firm power producer generating unit,
- efficiency characteristics of each MECO and firm power producer generating unit,
- calculated penalty factors used to commit MECO units,
- operating constraints such as must-run units or minimum energy purchases from purchased power producers,



- actual planned maintenance outages for the generating units,
- estimated forced and unplanned maintenance outages for the generating units, and
- inventory prices for fuels used by the generating units.

#### 4.2 Differences between 2008 Modeled and Actual Results

The results from the production simulation were compared to the actual recorded energy and run time for the system. The net energy and run time comparisons are shown in Figures A-1 and A-2 of the Appendix, respectively. The largest deviations between the production simulation and actual results were in the cycling and peaking units. The noticeable differences include, but are not limited to, the following:

- The actual net energy for Kahului Unit 1 was slightly lower than in the production simulation;
- The actual net energy for the Maalaea Units 6 and 9 diesels was lower than in the production simulation;
- The actual net energy for the Maalaea Unit 5 (peaking) diesel was lower than in the production simulation; and
- The actual net energies and run times for the Maalaea peaking units (Maalaea Unit X2 and Units 1 through Unit 3) were higher than in the production simulation.

#### 4.3 Reasons for Differences in 2008 Modeled and Actual Results

The actual operating conditions of the utility system are simulated in the computer model as accurately as possible; however, there are some operating conditions that cannot be accurately simulated in the model. Whenever there is a difference between actual and modeled operation, there will likely be a difference between actual and modeled production statistics. The operating conditions that cannot be accurately simulated by the computer model include, but are not limited to, those identified in MECO's Direct Testimony, T-4, page 31-35, in Docket No. 2006-0387. In summary, these include:

- temporary unit deratings
- changes in unit commitment order
- unpredictable nature of intermittent, as-available resources
- actual system conditions
- changes in penalty factors updated every 15-minutes
- actual system load
- steam turbine and combustion turbine performance



#### 4.3.1 Temporary Unit Deratings

Not all actual unit deratings that occurred in the calibration year are reflected in the production simulation. Deratings are not reflected in the model unless they are sustained for the majority of the month. If a unit is derated at various levels during a month, the average MW level of the derating is used in the production simulation. For example, HC&S's actual MW level was not constant at 12 MW for all on-peak hours and 8 MW for all off-peak hours in 2008. HC&S was modeled using their average MW level for each month.

#### 4.3.2 Changes in Unit Commitment Order

Not all changes in unit commitment that occurred in the calibration year can be reflected in the production simulation. There are several reasons why changes in unit commitment order occurred in 2008. These reasons include, but are not limited to, the following:

- a. A unit which has a problem with a piece of auxiliary equipment, such as a tube leak, may be placed at the bottom of the commitment order to reduce the risk of failure;
- b. Operational constraints on the system requiring generation to be operated differently to avoid transmission component overload or provide voltage support and/or reduce risk conditions during poor weather or other dynamic situations such as the behavior of as-available energy production;
- c. Planned or unplanned outage of a generating unit low in the commitment order; including independent power producers, can alter the remaining commitment order even to the point of making an intermediate unit operate as a baseload unit.

Steps are taken to minimize differences between actual and modeled operations attributable to the unit commitment order. In instances where it is known that actual operations deviate from the typical commitment order due to operational reasons, an adjustment is made in the modeling.

#### 4.3.3 Actual System Conditions

There were many unpredictable events that occurred in 2008 that the production simulation could not accurately simulate. These events include, but are not limited to, the following



- a. The planned outage schedules for all the MECO thermal units are input in the computer model. Unplanned maintenance outages are incorporated into the computer model as a percentage of time over the entire year. The P-MONTH computer model has the capability of automatically scheduling unplanned maintenance outages for all the thermal units based on the maintenance outage rate ("MOR"). However, the MOR is rounded to the nearest week and scheduled as one block of time. For example, an MOR of 1.11% is equivalent to 4 days, but the computer model will round this to 1 week or 7 days.

For future production simulations, the automatic maintenance scheduling model will be used along with a historical MOR to account for future unplanned outages. Therefore, the methodology used to account for unplanned scheduled outages in the calibration year is consistent with the methodology that would be used for a forward-looking year.

- b. Actual forced outage events, partial and full outages, are incorporated into the computer model using the FOR percentage over the entire year. Therefore, the modeled forced outages may not occur at the same times or for the same durations as the actual outages. This will result in some differences in unit dispatch between modeled and actual results. For large forced outage events, the actual outage was input into the model and the FOR percentage was recalculated to reflect this modification.
- c. The production simulation includes an amount of regulating reserve, as identified in MECO's Test Year 2007 Rate Case, Docket No. 2006-0387, MECO T-4, page 27. Under normal operating conditions, MECO carries about a 15 MW regulating reserve. As stated in MECO's Test Year 2007 Rate Case, MECO T-5, page 8, "...MECO decided to use 8 MW as an average level of regulating reserve required to cover KWP. The 8 MW plus the 7 MW of base regulating reserve results in 15 MW of total regulating reserve. In reality, there may have been instances when there was more or less reserve at any given hour than what was captured in the model. During times of high as-available (wind) production, MECO may maintain a larger amount of reserve, up to the amount of as-available energy production in order to maintain reliable service to customers as wind power output fluctuates.
- d. As-available energy from wind and hydro units in actuality can vary from minute-to-minute, hour-to-hour, and day-to-day. As described in section 3.1.2, the as-available energy is treated as an hourly transaction in the model, so the variability by minute, is not captured



by the production simulation. Although the as-available energy is not included in the calculation of the calibration factor itself, it does impact the generation of the firm units which are used to calculate the calibration factor.

## 5.0 Observation

Differences in system operating conditions affect the calibration factor from year to year as reviewed in section 4.3.

Similar to the 2007 Calibration Factor Report, the larger calibration factor derived for 2008 can be attributed in large part to the unpredictable nature of the wind power output, which varies from second to second. The production simulation model does not have the capability to capture or simulate this random variability or the generating units' actions to compensate for the wind power fluctuations.

## 6.0 Future Calibration Factors

As noted in Section 4.3 above, the model cannot simulate the minute-to-minute output variations of intermittent, as-available resources. As the amount of as-available resources (such as wind and photovoltaic resources) on the grid increases, the numerical value of the calibration factor is likely to increase. This is because system fuel efficiency will likely decrease in a way that the model cannot accurately capture. The fuel efficiencies of the generating units over their load range are determined by field tests under steady-state conditions. Under actual, dynamic conditions, where the generating units are continuously ramping up and down on a minute-to-minute basis to counteract the fluctuating outputs of the as-available generating units in order to keep supply and demand in balance, the fuel efficiencies of the generating units will be lower than under steady-state conditions. The model will not be able to accurately capture this and the difference between modeled fuel consumption and actual fuel consumption will be larger compared to when there is little as-available generation on the grid.



## APPENDICES

### A. Calibration Year 2008 Workpapers

	<u>Appendix Page Number</u>
1) Table A-1: Production Simulation Calibration	1
2) Calibration Reasonableness Check	
Table A-2a: Comparison of Heat Rate	2
Table A-2b: Comparison of Net MWh	3
Figure A-1: Charts of Comparison of Net Energy in GWh	4-5
Figure A-2: Charts of Comparison of Run Time in Hours	6-7
3) Raw Output from Production Simulation Model	8-12
4) System/Fuel Input File into Production Simulations	13-18
5) Thermal Basic/Unit costs/Performance/Maintenance Input Files	19-22
6) Fixed Energy Transactions Input File	23
7) Combined Cycle Basic/ Cost/ Performance/ Maintenance	24-27
8) Operating Reserve Requirement Input File	28
9) 2008 Area Load Files	29-34
10) Pattern Files	35-74
11) Table A-3: Year 2008 Annual Production Report	75



**Table A-1****2008 PRODUCTION SIMULATION - CALIBRATION RUN**

<b>Kahului</b>				
Actual Net MWH	=	203,085		
Actual MBTU	=	2,933,936		
Actual Net Heat Rate	=	14,447	BTU/kWh	
Simulated Net MWH	=	204,015		
Simulated MBTU	=	2,850,000		
Simulated Net Heat Rate	=	13,970	BTU/kWh	
MSFO Calibration Factor	=	Actual Heat Rate / Simulated Heat Rate		
	=	14,447	/	13,970 = <b>1.034</b>
<b>Maalaea</b>				
Actual Net MWH	=	843,328		
Actual MBTU	=	7,779,437		
Actual Net Heat Rate	=	9,225	BTU/kWh	
Simulated Net MWH	=	842,256		
Simulated MBTU	=	7,489,700		
Simulated Net Heat Rate	=	8,892	BTU/kWh	
Diesel Calibration Factor	=	Actual Heat Rate / Simulated Heat Rate		
	=	9,225	/	8,892 = <b>1.037</b>
<b>TOTAL SYSTEM</b>				
Actual Net MWH	=	1,046,413		
Actual MBTU	=	10,713,372		
Simulated Net MWH	=	1,046,271		
Simulated MBTU	=	10,339,700		
Actual Net Heat Rate	=	10,238	BTU/kWh	
Simulated Net Heat Rate	=	9,882	BTU/kWh	
Proposed Calib. Factor	=	Actual Heat Rate / Simulated Heat Rate		
	=	10,238	/	9,882 = <b>1.036</b>



**Table A-2a**

**COMPARISON OF PMONTH TO ACTUALS**

**2008 CALIBRATION**

**HEAT RATE (Btu/kWh)**

KAHULUI				MAALAEA			
	Pmonth 2008	RECORDED	% DIFF		Pmonth 2008	RECORDED	% DIFF
Jan	13.709	14.462	-5.21%		8.870	9.260	-4.20%
Feb	13.765	14.208	-3.12%		8.819	9.106	-3.15%
Mar	13.802	14.205	-2.83%		8.876	9.304	-4.60%
Apr	13.912	14.098	-1.32%		8.904	9.116	-2.32%
May	13.819	14.167	-2.46%		8.924	9.111	-2.05%
Jun	14.347	14.766	-2.84%		8.795	9.175	-4.14%
Jul	14.531	14.898	-2.46%		8.825	9.087	-2.89%
Aug	14.004	14.506	-3.46%		8.891	9.172	-3.06%
Sep	13.912	14.485	-3.96%		8.872	9.165	-3.20%
Oct	13.911	14.494	-4.02%		8.829	9.201	-4.04%
Nov	14.124	14.648	-3.58%		9.123	9.552	-4.48%
Dec	13.999	14.466	-3.23%		9.013	9.489	-5.01%
<b>Total</b>	13.970	14.447	-3.30%		8.892	9.224	-3.60%



Table A-2b

**COMPARISON OF PMONTH TO ACTUALS**  
**2008 CALIBRATION**

Unit	2008 PMONTH	2008 ACTUAL	Difference		% of Net Gen		
			MWH	%	PMONTH	ACTUAL	DIFF
Kahului1	16,363	15,433	931	6%	1.31%	1.24%	0.07%
Kahului2	23,912	23,446	466	2%	1.92%	1.88%	0.04%
Kahului3	74,386	73,712	674	1%	5.96%	5.91%	0.05%
Kahului4	89,354	90,494	-1,140	-1%	7.16%	7.26%	-0.09%
MaalaeaX1	2,103	2,014	89	4%	0.17%	0.16%	0.01%
MaalaeaX2	1,900	2,978	-1,078	-36%	0.15%	0.24%	-0.09%
Maalaea1	1,593	2,907	-1,314	-45%	0.13%	0.23%	-0.11%
Maalaea2	1,284	2,224	-940	-42%	0.10%	0.18%	-0.08%
Maalaea3	1,168	2,767	-1,599	-58%	0.09%	0.22%	-0.13%
Maalaea4	9,582	9,146	436	5%	0.77%	0.73%	0.04%
Maalaea5	2,630	2,204	426	19%	0.21%	0.18%	0.03%
Maalaea6	6,644	5,749	895	16%	0.53%	0.46%	0.07%
Maalaea7	1,218	1,434	-216	-15%	0.10%	0.11%	-0.02%
Maalaea8	9,556	9,355	201	2%	0.77%	0.75%	0.02%
Maalaea9	3,164	2,530	634	25%	0.25%	0.20%	0.05%
Maalae10	35,599	36,834	-1,235	-3%	2.85%	2.95%	-0.10%
Maalae11	27,137	27,179	-42	0%	2.18%	2.18%	0.00%
Maalae12	35,446	34,876	570	2%	2.84%	2.80%	0.05%
Maalae13	37,238	38,991	-1,753	-4%	2.99%	3.13%	-0.14%
M141516	347,764	347,445	319	0%	27.88%	27.86%	0.03%
M171819	318,230	314,696	3,534	1%	25.52%	25.23%	0.29%
HC&S (IPP)	91,923	91,916	7	0%	7.37%	7.37%	0.00%
KWP (IPP)	108,979	108,987	-8	0%	8.74%	8.74%	0.00%
<b>TOTAL</b>	<b>1,247,173</b>	<b>1,247,316</b>	<b>-143</b>	<b>0%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>0.00%</b>



Figure A-1  
COMPARISON OF PMONTH TO ACTUALS  
NET ENERGY IN GWH

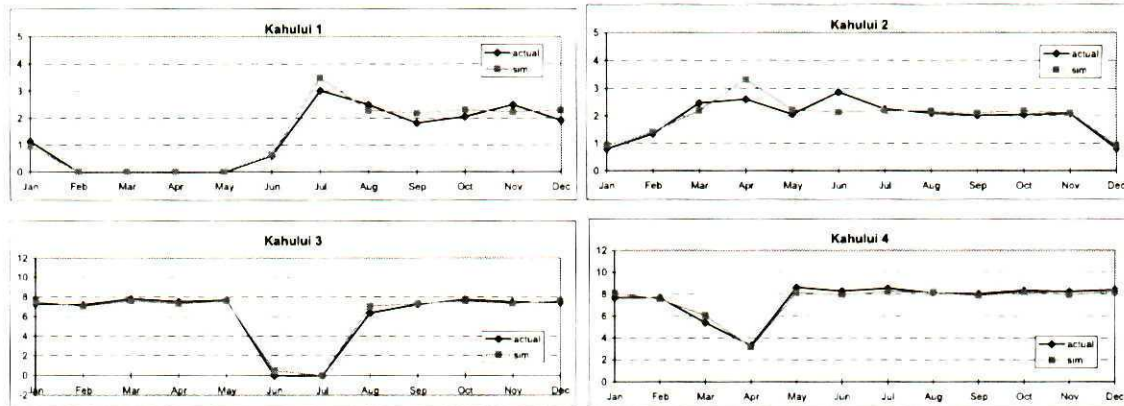




Figure A-1 (continued)  
COMPARISON OF PMONTH TO ACTUALS  
NET ENERGY IN GWH

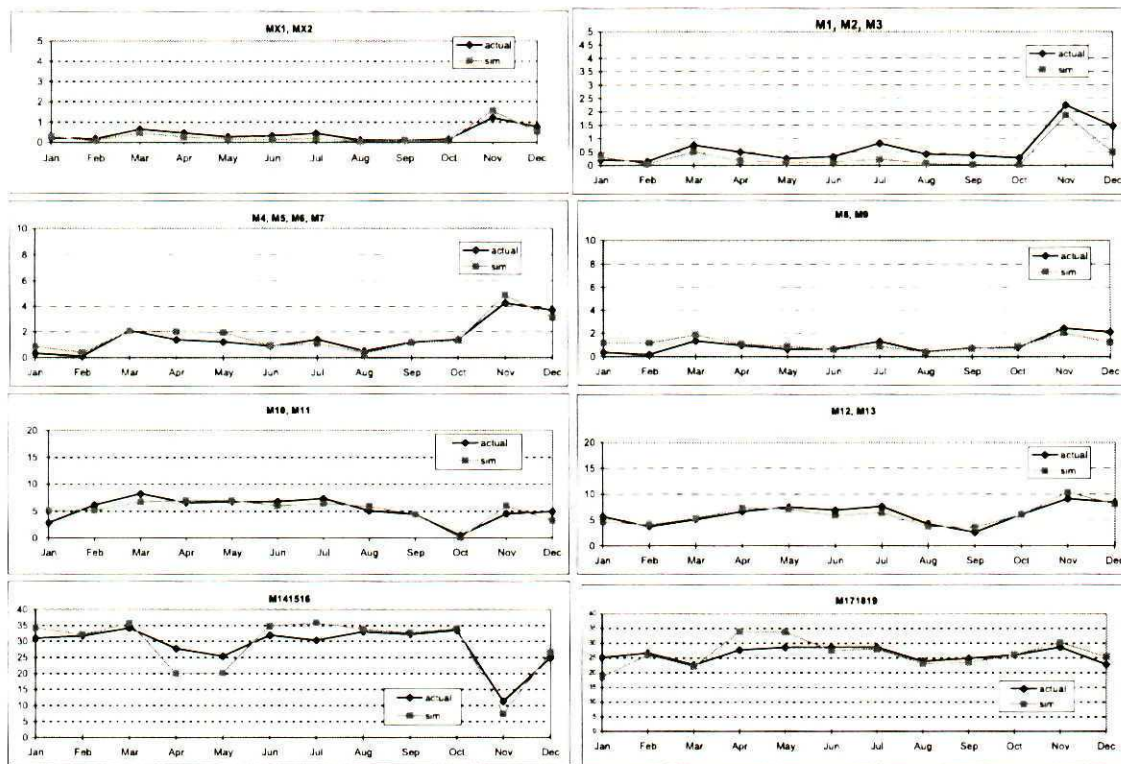




Figure A-2  
COMPARISON OF PMONTH TO ACTUAL  
RUNTIME IN HOURS

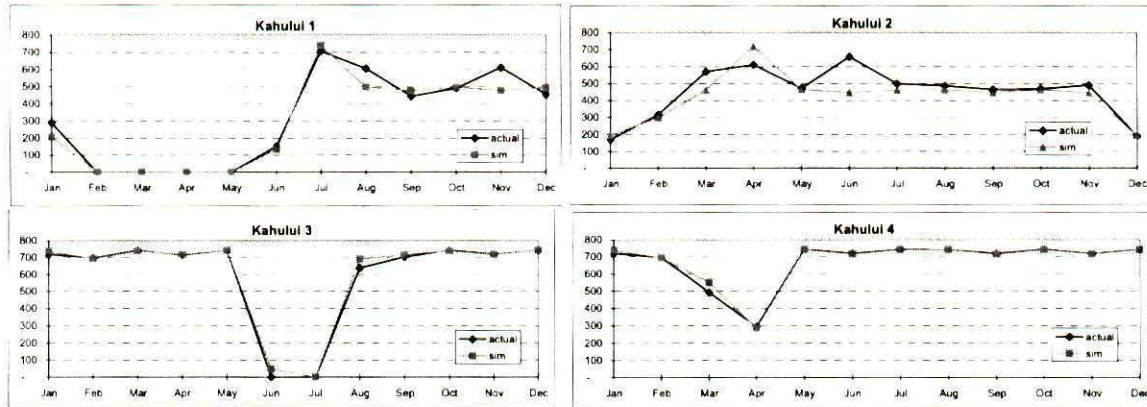
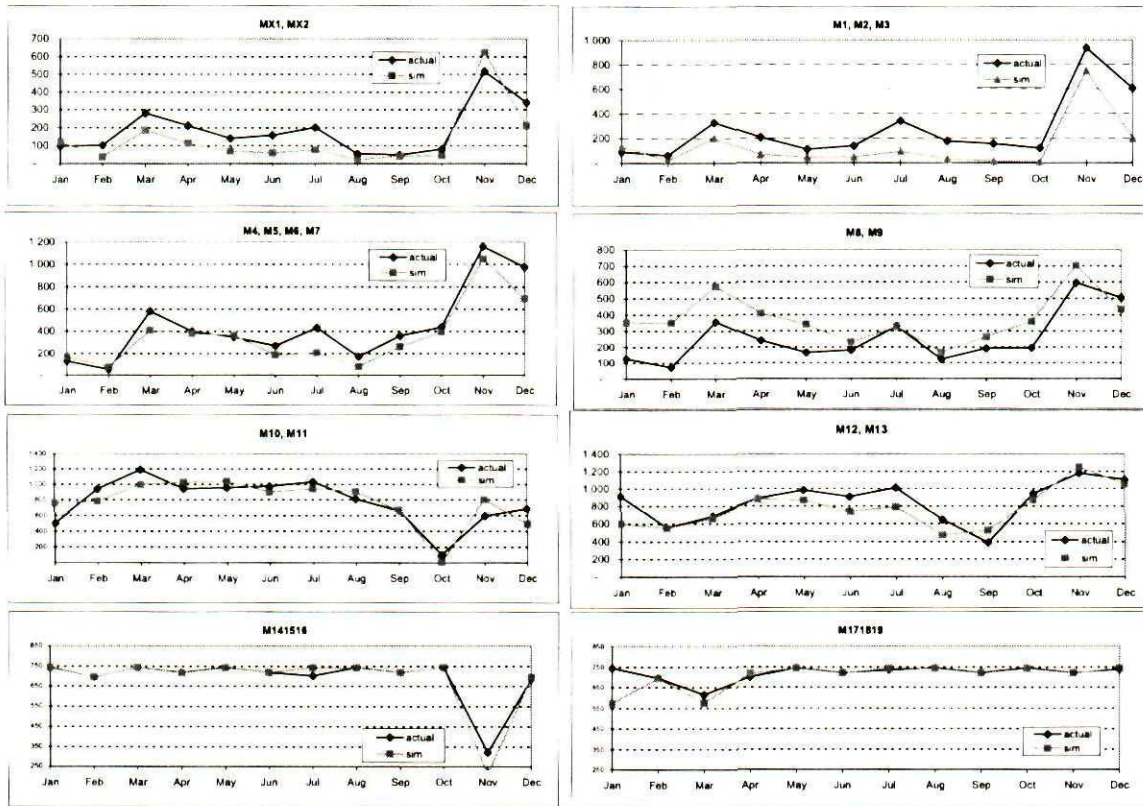




Figure A-2 (continued)  
 COMPARISON OF PMONTH TO ACTUAL  
 RUNTIME IN HOURS





**Maui Electric Company, Limited**

**2008 PRODUCTION SIMULATION - CALIBRATION**

**Yearly Output**

PPC Proprietary Program Licensed to HECO    Till 12/2099    HECO PMONTH V.20081013  
2008 MECO Calibration Factor Report    Page: 1  
03/13/09 14:25:34

Case Name: calibration2008  
Simulation Period: 2008/ 1 - 2008/12

File	Name
Study Data:	calibration2008.stu
Report Control:	calibration2008.rfc
Area Data:	calibration2008.ara
Plant Data:	calibration2008.plt
Fuel Class Data:	calibration2008.fcl
Spot Fuel Data:	calibration2008.sfu
Contract Fuel Data:	
Thermal Basic Data:	calibration2008.uba
Thermal Cost Data:	calibration2008.ucs
Thermal Performance Data:	calibration2008.upf
Thermal NOx Data:	
Hourly Pattern # 17:	ptn17.hcp
Hourly Pattern # 18:	ptn18.hcp
Hourly Pattern # 19:	ptn19.hcp
Hourly Pattern # 20:	ptn20.hcp
Hydro Data:	
Pumped Storage Data:	
Fixed Energy Transaction Data:	calibration2008.trf
Hourly Transaction # 5:	ptn5.htr
Hourly Transaction # 6:	ptn6.htr
Economy Transaction Data:	
DSM Data:	
Monte Carlo Scenario Data:	calibration2008.mcs
Thermal Maintenance Data:	calibration2008.umd
Hydro Maintenance Data:	
P-S Maintenance Data:	
Load Data:	calibration2008.eei
CC Data #1:	calibration2008.cc1
CC Data #2:	calibration2008.cc2
CC Data #3:	calibration2008.cc3
CC Data #4:	
CC Maintenance Data:	calibration2008.cmt
Quick Load Pick Up Curve Data:	
Spinning Reserve Data:	calibration2008.spn



## Maui Electric Company, Limited

## 2008 PRODUCTION SIMULATION - CALIBRATION

## Yearly Output (continued)

PPC Proprietary Program Licensed to HECO

Till 12/2099

HECO PMONTH V.20081013

2008 MECO Calibration Factor Report

Page: 2

03/13/09 14:31:32

Calendar Year: 2008

## Monthly system Load and Capacity Summary

Mnth	Peak Load MW	Mnthly Energy GWh	Load Factor %	Installed Capacity MW	Maint outage MW	Adjusted Capacity MW	Capacity Reserve MW	Capacity Reserve %
Jan	194.4	103.1	71.3	232.4	5.5	226.9	32.5	16.72
Feb	192.8	98.2	73.2	232.4	10.2	222.2	29.4	15.25
Mar	191.8	106.8	74.8	232.4	17	215.4	23.6	12.29
Apr	187.1	102	75.7	220.1	22.1	198	10.9	5.85
May	186.8	106.8	76.8	220.1	4.7	215.4	28.6	15.33
Jun	188.4	104.7	77.2	231.9	19	212.9	24.5	13.01
Jul	191.6	112.6	79	231.9	19	212.9	21.3	11.14
Aug	189.8	108.8	77	229.2	8	221.2	31.4	16.56
Sep	184.4	101.2	76.2	225.8	8.8	217	32.6	17.66
Oct	189.1	104.7	74.4	229.2	8.8	220.4	31.3	16.57
Nov	187.5	98.5	73	220.3	24.3	195.9	8.4	4.5
Dec	188.1	100.1	71.5	224.7	4.8	219.9	31.8	16.9

## Summary for Period:

Peak Load	(MW):	194.4
Total Energy	(GWh):	1247.51
Load Factor	(%):	73.06

Month	AM Peak (MW)	PM Peak (MW)	Capacity (MW)	Maint. (MW)	Reserve (MW)	Largest (MW)	LSC (MW)	Diff. (MW)
Jan	169.8	194.4	232.4	5.5	32.5	54.6	172.3	-22.1
Feb	167.6	192.8	232.4	10.2	29.4	54.6	167.6	-25.2
Mar	173.3	191.8	232.4	17	23.6	54.6	160.8	-31
Apr	176.4	187.1	220.1	22.1	10.9	54.6	143.5	-43.6
May	178.7	186.8	220.1	4.7	28.6	54.6	160.8	-26
Jun	183.8	188.4	231.9	19	24.5	54.6	158.3	-30.1
Jul	184.9	191.6	231.9	19	21.3	54.2	158.8	-32.8
Aug	183.8	189.8	229.2	8	31.4	54.2	167	-22.8
Sep	174.5	184.4	225.8	8.8	32.6	54.2	162.8	-21.6
Oct	174.4	189.1	229.2	8.8	31.3	54.2	166.3	-22.8
Nov	170.1	187.5	220.3	24.3	8.4	51.4	144.5	-43
Dec	163.9	188.1	224.7	4.8	31.8	54	165.9	-22.2



**Maui Electric Company, Limited**  
**2008 PRODUCTION SIMULATION - CALIBRATION**  
Yearly Output (continued)

PPC Proprietary Program Licensed to MECO T-18 12/2099 HECO FMONTH V 20081013  
2008 MECO Calibration Factor Report Page: 3  
03/13/09 14:31:32

Fiscal Year: 2008

Station Summary

Station	Capacity MW	Unit	Hours	CF %	Energy GWh	MBtu k	Cold Start	Warm Start	Shut Cst M\$	Fuel Cst M\$	VO&M Cst M\$	FO&M Cst M\$	Oper Cst \$/MWh	Tot Cst \$/MWh	Ave Hrt Btu/kWh
1 Kahului1	4.7	1	3518.3	39.53	16.362	252	168	0	0	4.0973	0.0244	1.3542	249.5	334.67	15404
2 Kahului2	4.8	1	5059	57.16	23.914	381.3	290	0	0	5.8277	0.036	1.3314	242.54	300.87	15943
3 Kahului3	11	1	7283	77.08	74.385	978	2	0	0	15.0383	0.0975	1.2618	203.35	220.44	13148
4 Kahului4	11.9	1	8119.9	85.58	89.354	1238.8	2	0	0	19.051	0.1257	1.2809	214.52	228.95	13864
7 Maalaea1	2.5	1	841.6	9.58	2.104	21.8	154	0	0	0.5055	0.0259	0.3988	250.85	442.06	10361
8 Maalaea2	2.5	1	760.1	8.65	1.9	19.7	162	0	0	0.4652	0.0234	0.3988	255.09	466.94	10373
9 Maalaea1	2.5	1	637.5	7.25	1.594	16.5	130	0	0	0.3885	0.0196	0.3988	254.17	506.28	10369
10 Maalaea2	2.5	1	513.1	5.84	1.283	13.3	103	0	0	0.3086	0.0158	0.3988	250.97	563.66	10368
11 Maalaea3	2.5	1	467.2	5.32	1.168	12.1	90	0	0	0.2845	0.0144	0.3988	254.02	597.21	10365
12 Maalaea4	5.5	1	2013.1	19.79	9.583	96.7	300	0	0	2.3479	0.0606	0.5489	247.45	308.62	10094
13 Maalaea5	5.5	1	616.1	5.45	2.631	31.4	112	0	0	0.7392	0.0181	0.5489	282.7	496.49	11923
14 Maalaea6	5.5	1	1421.1	13.72	6.645	69.2	242	0	0	1.5875	0.0426	0.5489	241.07	327.93	10408
15 Maalaea7	5.5	1	228.7	2.52	1.218	13.1	64	0	0	0.3018	0.0071	0.5489	247.48	704.28	10793
16 Maalaea8	5.5	1	3255.5	19.84	9.555	103.5	381	0	0	2.4315	0.1317	0.4381	255.72	314.12	10836
17 Maalaea9	5.5	1	1255.6	6.57	3.164	37.8	243	0	0	0.8988	0.0503	0.4381	275.76	438.39	11936
18 Maalaea10	12.3	1	5197.9	32.82	35.598	345.7	337	0	0	8.4856	0.4775	0.5434	241.33	267.05	9710
19 Maalaea11	8.8	1	4143.9	35.06	27.137	265.1	360	0	0	6.3728	0.38	0.5434	234.68	268.87	9770
20 Maalaea12	12.3	1	5490.1	32.68	35.447	354.2	411	0	0	8.5239	0.5032	0.5434	248.7	270	9991
21 Maalaea13	12.3	1	3767.5	34.82	37.236	358.7	363	0	0	8.6578	0.3521	0.5434	237.04	256.56	9632
1 M141516	54.2	1	8217.4	75.84	347.764	3006	30	0	0	73.9002	1.9986	2.5799	218.23	225.67	8644
2 M171819	54.6	1	8429.8	68.57	318.231	2724.5	242	0	0	66.4534	1.885	2.5799	213.83	222.22	8562
System					1046.273	10339	4186	0	0	226.6669	6.0896	17.6276	220.87	239.31	9882



**Maui Electric Company, Limited**

**2008 PRODUCTION SIMULATION - CALIBRATION**

**Yearly Output (continued)**

PPC Proprietary Program Licensed to HECO Till 12/2099 HECO PMONTH V.20081013  
2008 MECO Calibration Factor Report Page: 4  
03/13/09 14:31:32

Fiscal Year: 2008

Transaction Summary

ID	Transaction	Type	Energy GWh	Engy Cost M\$	CAP Cost M\$	Total Cost M\$	Ave Cost \$/MWh
3	HCS_ON	ON-PEAK P	59.389	0	0	0	0
4	HCS_OFF	OFF-PEAK P	32.532	0	0	0	0
5	KWPON	HOURLY PI	60.65	0	0	0	0
6	KWPOFF	HOURLY PI	48.329	0	0	0	0
15	HANA	ON-PEAK P	0.051	0	0	0	0

0

PPC Proprietary Program Licensed to HECO Till 12/2099 HECO PMONTH V.20081013  
2008 MECO Calibration Factor Report Page: 5  
03/13/09 14:31:32

Fiscal Year: 2008

Fuel Type Summary

Type	Energy GWh	Fuel ,000	Fuel Unit	MBtu ,000	Fuel Cost M\$	Fuel Cost \$/MWh	Heat Rate Btu/kWh	Fuel Cost C/MBtu
S pot:								
1 Kahului	204.016	452.398	Bbl	2850.1	44.0143	215.74	13970	1544.3
2 Maalaea	842.257	1276.294	Bbl	7489.3	182.6526	216.86	8892	2438.85

Fuel Class Summary

Class	Energy GWh	Fuel ,000	Fuel Unit	MBtu ,000	Fuel Cost M\$	Fuel Cost \$/MWh	Heat Rate Btu/kWh	Fuel Cost C/MBtu
1 MSFO	204.016	452.398	Bbl	2850.1	44.0143	215.74	13970	1544.3
2 Diesel	842.257	1276.294	Bbl	7489.3	182.6526	216.86	8892	2438.8



Maui Electric Company, Limited

2008 PRODUCTION SIMULATION - CALIBRATION

Yearly Output (continued)

PPC Proprietary Program Licensed to HECO Till 12/2099 HECO PMONTH V.20081013  
2008 MECO Calibration Factor Report Page: 6  
03/13/09 14:31:32

Fiscal Year: 2008

System Energy and Cost Summary

Demand				Supply			
	GWh	Cost M\$	Cost \$/MWh		GWh	Cost M\$	Cost \$/MWh
Load:	1247.51			Thermal Gen:	1046.27	250.3841	239.31
P-S Pumping:	0			Hydro Gen:	0	0	0
P-S Payback:	0			P-S Gen:	0	0	0
F. E. Sale:	0	0	0	F. E. Purc:	200.95	0	0
Econ. Sale:	0	0	0	Econ. Purc:	0	0	0
Unit Sale:	0	0	0	Rej. Fuel:		0	
Transm Loss:	0			Dsm Reductn	0		
Dsm Load:	0			Emerg Purc:	0	0	0
Dumped Enrgy	0	0	0	E.U. Energy:	0.28	0.2799	1000
Total:	1247.51	0	0	Lvl Cost:		0	
				Total:	1247.5	250.664	200.93
				System Net:		250.664	200.93
				LOLH(hr):	39.3		

PPC Proprietary Program Licensed to HECO Till 12/2099 HECO PMONTH V.20081013  
2008 MECO Calibration Factor Report Page: 7  
03/13/09 14:31:32

Fiscal Year: 2008

Plant Summary

Plant	CF %	Energy GWh	MBtu 1000 Ups	Start	Stup Cst M\$	Fuel Cst M\$	O&M Cst M\$	Tot Cst \$/MWh
1 Kahului	71.8	204.0155	2850.1	463	0	44.0143	5.5118	242.76
2 Maalaea	29.2	842.2574	7489.3	3723	0	182.6526	18.2053	238.48

Fiscal Year: 2008

Yearly Fuel & Var O&M Cost by Subperiod (M\$)

Off Peak	Shoulder	Pea	Priority	Peak	Total
74.059441	111.74313	46.953945	232.75652		

Study Period: 2008/Jan - 2008/Dec

Total Fuel & Var O&M Cost by Subperiod (M\$)

Off Peak	Shoulder	Peak	Priority	Peak	Total
74.059441	111.743126	46.953945	232.756516		



MECO Calibration Factor Report  
Year 2008  
Appendix A Workpapers  
Page 13 of 75

## System Study Summary

[illegible]



Report Control Summary

YR	PWD	FiscalYr	PrcCtrl	YrCtrl	AllocFile	StaRept	PitRept	AreaRept	PSRept	DiagRept	MeInFile	MonInFile	YrInFile	126
2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1



## Page 15 of 75

## Area Summary

ID	NAME	YR	PRD	SpinRav pc	SpinRav MW	Ldadj pc	Ldadj MW	Tie MW	Tie Cost	Tie CostEsc
17401		2008	1	0	0	0	0	0	0	0



Plant Summary

ID	NAME	YR	PRD	X31	X32	X33	X34	X35
1	FAHLEUS	2008	1	0	0	0	0	0
2	FAHLEUS	2008	1	0	0	0	0	0



**Fuel Class Summary**

ID	NAME	YR	PRD	FuelUnit
1	RES	2008	1	1
2	Disposal	2008	1	1



# Spot Fuel Summary

ID	NAME	YR	PRD	FuelClass	FuelCost	CartCost	CostEsc	HeatCont	Sos	CO2	ROC	Other
1	Katolol	2008	1	1	1,358,114	0	0	6.3	0	0	0	0
1	Katolol	2008	2	1	1,422,886	0	0	6.3	0	0	0	0
1	Katolol	2008	3	1	1,367,743	0	0	6.3	0	0	0	0
1	Katolol	2008	4	1	1,365,187	0	0	6.3	0	0	0	0
1	Katolol	2008	5	1	1,367,410	0	0	6.3	0	0	0	0
1	Katolol	2008	6	1	1,428,816	0	0	6.3	0	0	0	0
1	Katolol	2008	7	1	1,468,119	0	0	6.3	0	0	0	0
1	Katolol	2008	8	1	1,661,404	0	0	6.3	0	0	0	0
1	Katolol	2008	9	1	1,884,000	0	0	6.3	0	0	0	0
1	Katolol	2008	10	1	1,933,674	0	0	6.3	0	0	0	0
1	Katolol	2008	11	1	1,693,653	0	0	6.3	0	0	0	0
1	Katolol	2008	12	1	1,417,288	0	0	6.3	0	0	0	0
2	Mallaea	2008	1	2	2,041,883	0	0	5,868	0	0	0	0
2	Mallaea	2008	2	2	2,064,234	0	0	5,868	0	0	0	0
2	Mallaea	2008	3	2	2,046,245	0	0	5,868	0	0	0	0
2	Mallaea	2008	4	2	2,159,355	0	0	5,868	0	0	0	0
2	Mallaea	2008	5	2	2,435,045	0	0	5,868	0	0	0	0
2	Mallaea	2008	6	2	2,590,564	0	0	5,868	0	0	0	0
2	Mallaea	2008	7	2	2,824,572	0	0	5,868	0	0	0	0
2	Mallaea	2008	8	2	3,022,618	0	0	5,868	0	0	0	0
2	Mallaea	2008	9	2	2,905,216	0	0	5,868	0	0	0	0
2	Mallaea	2008	10	2	2,665,533	0	0	5,868	0	0	0	0
2	Mallaea	2008	11	2	2,424,467	0	0	5,868	0	0	0	0
2	Mallaea	2008	12	2	2,074,674	0	0	5,868	0	0	0	0



### Thermal Basic Summary

ID	NAME	VR	PRD	Area	Plant	ID	ID	Units	Pattern	Hr	Branching	Firm	OpType	Quick	Derate	EngLat	Ramp	Down	Up	SpkAv	Ownership	CatCost	OutEma	DepCost	DepEma	Scrub	Util
1	Maaliac1	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Maaliac2	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Maaliac3	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Maaliac4	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Maaliac5	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Maaliac6	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	Maaliac7	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Maaliac8	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Maaliac9	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	Maaliac10	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Maaliac11	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Maaliac12	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	Maaliac13	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14	Maaliac14	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15	Maaliac15	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	Maaliac16	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17	Maaliac17	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18	Maaliac18	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19	Maaliac19	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	Maaliac20	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21	Maaliac21	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1



### Thermal Cost and Variable Summary

ID	NAME	YR	PRD	Spof	Start	Start	Start	BRU	Stndng	VarOm	FixOm	Fix	CapCost	VarOm	FixOm	Cost	Dep	Cap	Trnsm	Start	Cost	HRVarOm	176	X31	X33
1	Kahlo1011	2008	1	1	1	14	0	0	0	1.46392	118.840	4	0	0	0	1	0.5	1	0	0	0.14639	0	0	0	0
2	Kahlo1012	2008	1	1	1	14	0	0	0	1.47597	110.94	5	0	0	0	1	0.5	1	0	0	0.14691	0	0	0	0
3	Kahlo1013	2008	1	1	1	20	0	0	0	1.3364	125.14	1	0	0	0	1	0.5	1	0	0	0.14661	0	0	0	0
4	Kahlo1014	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
5	Kahlo1015	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
6	Kahlo1016	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
7	Kahlo1017	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
8	Kahlo1018	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
9	Kahlo1019	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
10	Kahlo1020	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
11	Kahlo1021	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
12	Kahlo1022	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
13	Kahlo1023	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
14	Kahlo1024	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
15	Kahlo1025	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
16	Kahlo1026	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
17	Kahlo1027	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
18	Kahlo1028	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
19	Kahlo1029	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
20	Kahlo1030	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
21	Kahlo1031	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0
22	Kahlo1032	2008	1	1	1	20	0	0	0	0.91941	177.45	3	0	0	0	1	0.5	1	0	0	0.14651	0	0	0	0



Thermal Performance Summary

ID	NAME	YR	PRD	HROption	FOR	MOR	MinJDR	Cap1	HR1	Cap2	HR2	Cap3	HR3	Cap4
1	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	Kahului	2008	1	1	0.000	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000



# Thermal Maintenance Summary

ID	NAME	YR	PRD	Start Day	Days
1	Kaaliwa1	2008	1	14	14
2	Kaaliwa2	2008	1	14	27
3	Kaaliwa3	2008	14	14	18
4	Kaaliwa4	2008	6	8	62
5	Kaaliwa5	2008	3	24	28
6	Kaaliwa6	2008	3	25	8
7	Kaaliwa7	2008	7	15	47
8	Kaaliwa8	2008	1	1	8
9	Kaaliwa9	2008	10	8	12
10	Kaaliwa10	2008	6	9	35
11	Kaaliwa11	2008	9	24	4
12	Kaaliwa12	2008	10	3	12
13	Kaaliwa13	2008	10	3	12
14	Kaaliwa14	2008	1	9	57
15	Kaaliwa15	2008	7	18	4
16	Kaaliwa16	2008	4	2	9
17	Kaaliwa17	2008	6	10	94
18	Kaaliwa18	2008	6	3	5
19	Kaaliwa19	2008	12	1	26
20	Kaaliwa20	2008	8	12	51
21	Kaaliwa21	2008	3	10	3
22	Kaaliwa22	2008	8	11	8
23	Kaaliwa23	2008	9	9	4
24	Kaaliwa24	2008	9	22	4



## Fixed Energy Transaction Summary

ID	NAME	YR	PRD	Area	Peak	Def	Firm	MinCap	MaxCap	Energy	Engt	CapCost	EngCost	Cap	Engt	CapCost	EngCost	MDays	MPK	Hr1	MPK	Hr1	WEPL	Hr1	WEPL	Hr1
1	HPK ON	2004	1	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	HPK ON	2004	2	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1	8,000	10,000	5,190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	HPK ON	2004	4	1	4	1	1																			



Combined Cycle Basic Summary

ID	NAME	YR	PRD	Areal	Plant	CT	ST	Firm	Quick	Cost	Ownership	Spot	Start	Firm	Esc	CapCost	CTFOR	STFOR	MCR	Tinam	Util
				D		Units				Cat		Fuel	Fuel							Loss	Rear
1	6141536	2008	1	1	1	2	1	1	0	1	100	1	1	14975	1.8	0	0.48	0.48	0.514	1	1
2	6171819	2008	1	1	1	2	1	1	0	20	100	2	2	14995	1.8	0	0.327	0.327	0.786	1	1



MECO Calibration Factor Report  
 Year 2008  
 Appendix A Workpapers  
 Page 25 of 75

Combined Cycle Cost and Variable Summary

ID	NAME	YR	PRD	leg	CombF	Hr	Pattern	OpType	Down	Up	Ramp	Rate	HrVarOM	VarOM	VarOM	Esc	Start	BTU	Start	Fix	Spindaw	CostCost	CostBasis	DepCost	DepBasis	Dep	Prntly	Dep	Prntly	Cost	Scrub	Prntly	Cost	Scrub	Prntly	X31	X32
1	M141514	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	M141514	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	M141514	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	M171819	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	M171819	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	M171819	2008	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1



## Combined Cycle Performance Summary

ID	NAME	YR	PRD	CombPlay	HROption	MinDur	Cap1	HR1	Cap2	HR2	Cap3	HR3	Cap4
1	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
2	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
3	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
4	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
5	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
6	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
7	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
8	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
9	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
10	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
11	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
12	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
13	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
14	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
15	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
16	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
17	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
18	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
19	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
20	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
21	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
22	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
23	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
24	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
25	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
26	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
27	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
28	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
29	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
30	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558
31	954219	2008	1	1	1	0	16.972	72.918	19.492	4.453	14.326	0.084	43.558



Combined Cycle Maintenance Summary

ID	NAME	Comb Flag	YR	PRD	Start	
					Day	Days
1		1	2008	4	1	4
1		3	2008	11	10	28
1		1	2008	11	10	7
1		1	2008	12	13	10
2		3	2008	1	14	7
2		2	2008	1	14	7
2		3	2008	8	14	7
2		1	2008	11	10	9



### Operating Reserve Requirement

Year	Month	Day	Hour	Spin Req
2008	1	1	1	15
2008	1	2	1	15
2008	1	3	1	15
2008	1	4	1	15
2008	1	5	1	15
2008	1	6	1	15
2008	1	7	1	15



## Load Summary

Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
1/1/20	113.4	117.1	98.7	96.3	98.5	100.0	107.4	117.0	142.4	144.7	150.7	157.6	155.0	153.0	151.0	154.2	155.4	153.6	157.2	167.4	167.4	163.0	159.8	162.1
2/1/20	97.7	94.1	91.5	94.3	98.1	110.4	117.1	117.0	144.7	144.7	150.7	157.6	155.0	153.0	151.0	154.2	155.4	153.6	157.2	167.4	167.4	163.0	159.8	162.1
3/1/20	103.5	97.3	94.7	94.0	97.4	106.4	114.1	144.5	144.5	144.5	145.0	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1
4/1/20	104.8	98.4	94.4	95.4	95.6	118.6	118.6	144.5	144.5	144.5	145.0	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1
5/1/20	106.5	100.3	97.1	96.0	96.8	122.4	110.3	120.7	143.1	146.0	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4
6/1/20	107.6	93.0	96.0	94.9	97.9	126.4	107.4	120.7	143.1	146.0	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4
7/1/20	108.4	100.4	96.4	94.7	94.5	128.6	120.5	143.1	146.0	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4
8/1/20	109.4	98.4	98.4	95.4	95.4	130.4	124.4	143.1	146.0	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4
9/1/20	110.4	107.0	99.2	95.7	96.4	131.4	123.4	143.1	146.0	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4
10/1/20	109.4	103.4	99.3	96.3	97.4	130.4	123.4	143.1	146.0	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4
11/1/20	108.4	103.4	99.3	96.3	97.4	130.4	123.4	143.1	146.0	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4	146.4
12/1/20	107.4	102.4	98.4	95.4	96.4	129.4	122.4	142.4	145.4	145.4	145.4	145.4	145.4	145.4	145.4	145.4	145.4	145.4	145.4	145.4	145.4	145.4	145.4	145.4
1/1/21	106.4	101.4	97.4	94.4	95.4	128.4	121.4	141.4	144.4	144.4	144.4	144.4	144.4	144.4	144.4	144.4	144.4	144.4	144.4	144.4	144.4	144.4	144.4	144.4
2/1/21	105.4	100.4	96.4	93.4	94.4	127.4	120.4	140.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4	143.4
3/1/21	104.4	99.4	95.4	92.4	93.4	126.4	119.4	139.4	142.4	142.4	142.4	142.4	142.4	142.4	142.4	142.4	142.4	142.4	142.4	142.4	142.4	142.4	142.4	142.4
4/1/21	103.4	98.4	94.4	91.4	92.4	125.4	118.4	138.4	141.4	141.4	141.4	141.4	141.4	141.4	141.4	141.4	141.4	141.4	141.4	141.4	141.4	141.4	141.4	141.4
5/1/21	102.4	97.4	93.4	88.4	91.4	124.4	117.4	137.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4	140.4
6/1/21	101.4	96.4	92.4	87.4	90.4	123.4	116.4	136.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4	139.4
7/1/21	100.4	95.4	91.4	86.4	89.4	122.4	115.4	135.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4	138.4
8/1/21	99.4	94.4	90.4	85.4	88.4	121.4	114.4	134.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4	137.4
9/1/21	98.4	93.4	89.4	84.4	87.4	120.4	113.4	133.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4	136.4
10/1/21	97.4	92.4	88.4	83.4	86.4	119.4	112.4	132.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4	135.4
11/1/21	96.4	91.4	87.4	82.4	85.4	118.4	111.4	131.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4	134.4
12/1/21	95.4	90.4	86.4	81.4	84.4	117.4	110.4	130.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4	133.4
1/1/22	94.4	89.4	85.4	80.4	83.4	116.4	109.4	129.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4	132.4
2/1/22	93.4	88.4	84.4	79.4	82.4	115.4	108.4	128.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4	131.4
3/1/22	92.4	87.4	83.4	78.4	81.4	114.4	107.4	127.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4	130.4
4/1/22	91.4	86.4	82.4	77.4	80.4	113.4	106.4	126.4	129.4	129.4	129.4	129.4	129.4	129.4	129.4	129.4	129.4	129.4	129.4	129.4	129.4	129.4	129.4	129.4
5/1/22	90.4	85.4	81.4	76.4	79.4	112.4	105.4	125.4	128.4	128.4	128.4	128.4	128.4	128.4	128.4	128.4	128.4	128.4	128.4	128.4	128.4	128.4	128.4	128.4
6/1/22	89.4	84.4	80.4	75.4	78.4	111.4	104.4	124.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4	127.4
7/1/22	88.4	83.4	79.4	74.4	77.4	110.4	103.4	123.4	126.4	126.4	126.4	126.4	126.4	126.4	126.4	126.4	126.4	126.4	126.4	126.4	126.4	126.4	126.4	126.4
8/1/22	87.4	82.4	78.4	73.4	76.4	109.4	102.4	122.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4	125.4
9/1/22	86.4	81.4	77.4	72.4	75.4	108.4	101.4	121.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4	124.4
10/1/22	85.4	80.4	76.4	71.4	74.4	107.4	100.4	120.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4
11/1/22	84.4	79.4	75.4	70.4	73.4	106.4	99.4	119.4	122.4	122.4	122.4	122.4	122.4	122.4	122.4	122.4	122.4	122.4	122.4	122.4	122.4	122.4	122.4	122.4
12/1/22	83.4	78.4	74.4	69.4	72.4	105.4	98.4	118.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4
1/1/23	82.4	77.4	73.4	68.4	71.4	104.4	97.4	117.4	120.4	120.4	120.4	120.4	120.4	120.4	120.4	120.4	120.4	120.4	120.4	120.4	120.4	120.4	120.4	120.4
2/1/23	81.4	76.4	72.4	67.4	70.4	103.4	96.4	116.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4
3/1/23	80.4	75.4	71.4	66.4	69.4	102.4	95.4	115.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4	118.4
4/1/23	79.4	74.4	70.4	65.4	68.4	101.4	94.4	114.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4
5/1/23	78.4	73.4	69.4	64.4	67.4	100.4	93.4	113.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4	116.4
6/1/23	77.4	72.4	68.4	63.4	66.4	99.4	92.4	112.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4	115.4
7/1/23	76.4	71.4	67.4	62.4	65.4	98.4	91.4	111.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4	114.4
8/1/23	75.4	70.4	66.4	61.4	64.4	97.4	90.4	110.4	113.4	113.4	113.4	113.4	113.4	113.4	113.4	113.4	113.4	113.4	113.4	113.4	113.4	113.4	113.4	113.4
9/1/23	74.4	69.4	65.4	60.4	63.4	96.4	89.4	109.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4	112.4
10/1/23	73.4	68.4	64.4	59.4	62.4	95.4	88.4	108.4	111.4	111.4	111.4	111.4	111.4	111.4	111.4	111.4	111.4	111.4	111.4	111.4	111.4	111.4	111.4	111.4
11/1/23	72.4	67.4	63.4	58.4	61.4	94.4	87.4	107.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4
12/1/23	71.4	66.4	62.4	57.4	60.4	93.4	86.4	106.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4	109.4
1/1/24	70.4	65.4	61.4	56.4	59.4	92.4	85.4	105.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.							



### Load Summary (continued)

Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
3/31/08	106.8	106.7	98.2	98.0	97.0	107.0	112.8	146.4	142.4	133.0	136.4	136.8	135.8	130.9	135.0	135.0	136.2	140.0	134.0	136.0	137.2	144.0	141.4	131.0
4/1/08	105.1	99.8	98.6	98.0	98.0	103.0	109.1	141.9	133.4	147.0	150.8	154.3	152.3	154.4	151.2	150.2	150.2	144.1	151.0	139.4	140.4	146.9	141.4	131.0
4/3/08	101.7	97.5	94.9	94.7	95.8	108.4	126.4	138.7	155.0	144.1	149.5	149.6	149.6	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5
4/4/08	105.3	99.5	98.0	98.0	98.0	108.4	126.4	138.7	155.0	144.1	149.5	149.6	149.6	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5
4/5/08	104.1	99.7	97.6	96.6	109.5	128.0	149.0	153.4	147.8	149.0	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5
4/6/08	104.9	99.1	97.6	96.6	109.5	128.0	149.0	153.4	147.8	149.0	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5
4/7/08	104.9	99.1	97.6	96.6	109.5	128.0	149.0	153.4	147.8	149.0	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5
4/8/08	104.9	99.1	97.6	96.6	109.5	128.0	149.0	153.4	147.8	149.0	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5
4/9/08	104.9	99.1	97.6	96.6	109.5	128.0	149.0	153.4	147.8	149.0	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5
4/10/08	104.9	99.1	97.6	96.6	109.5	128.0	149.0	153.4	147.8	149.0	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5
4/11/08	104.9	99.1	97.6	96.6	109.5	128.0	149.0	153.4	147.8	149.0	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5
4/12/08	104.9	99.1	97.6	96.6	109.5	128.0	149.0	153.4	147.8	149.0	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5
4/13/08	104.9	99.1	97.6	96.6	109.5	128.0	149.0	153.4	147.8	149.0	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5
4/14/08	104.9	99.1	97.6	96.6	109.5	128.0	149.0	153.4	147.8	149.0	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5
4/15/08	104.9	99.1	97.6	96.6	109.5	128.0	149.0	153.4	147.8	149.0	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5
4/16/08	104.9	99.1	97.6	96.6	109.5	128.0	149.0	153.4	147.8	149.0	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5	149.5
4/17/08	103.4	98.1	96.8	96.8	98.1	107.7	112.5	145.9	141.9	132.0	135.4	135.8	134.8	129.9	134.0	134.0	135.2	139.0	133.0	135.0	136.2	143.0	140.4	130.0
4/18/08	103.4	98.1	96.8	96.8	98.1	107.7	112.5	145.9	141.9	132.0	135.4	135.8	134.8	129.9	134.0	134.0	135.2	139.0	133.0	135.0	136.2	143.0	140.4	130.0
4/19/08	103.4	98.1	96.8	96.8	98.1	107.7	112.5	145.9	141.9	132.0	135.4	135.8	134.8	129.9	134.0	134.0	135.2	139.0	133.0	135.0	136.2	143.0	140.4	130.0
4/20/08	103.4	98.1	96.8	96.8	98.1	107.7	112.5	145.9	141.9	132.0	135.4	135.8	134.8	129.9	134.0	134.0	135.2	139.0	133.0	135.0	136.2	143.0	140.4	130.0
4/21/08	103.4	98.1	96.8	96.8	98.1	107.7	112.5	145.9	141.9	132.0	135.4	135.8	134.8	129.9	134.0	134.0	135.2	139.0	133.0	135.0	136.2	143.0	140.4	130.0
4/22/08	103.4	98.1	96.8	96.8	98.1	107.7	112.5	145.9	141.9	132.0	135.4	135.8	134.8	129.9	134.0	134.0	135.2	139.0	133.0	135.0	136.2	143.0	140.4	130.0
4/23/08	103.4	98.1	96.8	96.8	98.1	107.7	112.5	145.9	141.9	132.0	135.4	135.8	134.8	129.9	134.0	134.0	135.2	139.0	133.0	135.0	136.2	143.0	140.4	130.0
4/24/08	103.4	98.1	96.8	96.8	98.1	107.7	112.5	145.9	141.9	132.0	135.4	135.8	134.8	129.9	134.0	134.0	135.2	139.0	133.0	135.0	136.2	143.0	140.4	130.0
4/25/08	103.4	98.1	96.8	96.8	98.1	107.7	112.5	145.9	141.9	132.0	135.4	135.8	134.8	129.9	134.0	134.0	135.2	139.0	133.0	135.0	136.2	143.0	140.4	130.0
4/26/08	103.4	98.1	96.8	96.8	98.1	107.7	112.5	145.9	141.9	132.0	135.4	135.8	134.8	129.9	134.0	134.0	135.2	139.0	133.0	135.0	136.2	143.0	140.4	130.0
4/27/08	103.4	98.1	96.8	96.8	98.1	107.7	112.5	145.9	141.9	132.0	135.4	135.8	134.8	129.9	134.0	134.0	135.2	139.0	133.0	135.0	136.2	143.0	140.4	130.0
4/28/08	103.4	98.1	96.8	96.8	98.1	107.7	112.5	145.9	141.9	132.0	135.4	135.8	134.8	129.9	134.0	134.0	135.2	139.0	133.0	135.0	136.2	143.0	140.4	130.0
4/29/08	103.4	98.1	96.8	96.8	98.1	107.7	112.5	145.9	141.9	132.0	135.4	135.8	134.8	129.9	134.0	134.0	135.2	139.0	133.0	135.0	136.2	143.0	140.4	130.0
4/30/08	103.4	98.1	96.8	96.8	98.1	107.7	112.5	145.9	141.9	132.0	135.4	135.8	134.8	129.9	134.0	134.0	135.2	139.0	133.0	135.0	136.2	143.0	140.4	130.0



### Load Summary (continued)

Date	H01	H02	H03	H04	H05	H06	H07	H08	H09	H10	H11	H12	H13	H14	H15	H16	H17	H18	H19	H20	H21	H22	H23	H24
6/1/08	126.5	132.5	98.4	94.5	103.9	102.6	124.2	144.9	154.0	164.5	169.8	169.2	169.4	174.4	184.5	194.9	195.4	195.4	195.4	195.4	195.4	195.4	195.4	195.4
6/2/08	136.1	131.8	100.1	94.9	106.3	112.8	129.8	149.7	155.5	163.4	166.9	169.6	171.5	172.9	172.9	172.9	172.9	172.9	172.9	172.9	172.9	172.9	172.9	
6/3/08	106.7	102.1	99.2	98.3	100.0	105.8	115.2	127.4	143.0	150.5	159.8	156.6	158.6	155.5	157.2	156.4	156.4	156.4	156.4	156.4	156.4	156.4	156.4	
6/4/08	125.4	102.2	98.1	97.5	99.7	109.6	128.4	145.7	148.0	158.5	152.9	154.0	153.9	154.5	154.5	154.5	154.5	154.5	154.5	154.5	154.5	154.5	154.5	
6/5/08	113.3	94.8	97.1	97.1	101.7	111.6	125.2	136.1	143.2	153.2	150.4	148.5	147.7	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8	
6/6/08	114.9	98.4	97.2	95.9	97.4	110.7	126.2	143.4	151.8	159.9	157.9	149.3	148.3	147.8	147.8	147.8	147.8	147.8	147.8	147.8	147.8	147.8	147.8	
6/7/08	104.6	94.7	97.0	97.1	100.1	110.4	124.7	139.2	153.3	163.1	155.2	146.6	146.8	146.9	146.9	146.9	146.9	146.9	146.9	146.9	146.9	146.9	146.9	
6/8/08	102.6	98.8	96.9	96.8	99.5	110.5	124.6	137.3	150.1	157.5	161.3	146.7	146.8	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	
6/9/08	109.7	102.2	97.2	96.6	99.9	109.9	125.1	137.9	151.3	160.0	154.1	145.3	146.7	146.6	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	147.1	
6/10/08	105.7	101.2	98.2	96.8	98.1	102.4	112.1	125.9	140.9	148.7	152.1	142.3	143.1	143.9	143.9	143.9	143.9	143.9	143.9	143.9	143.9	143.9	143.9	
6/11/08	113.8	99.3	97.4	94.8	96.2	101.9	124.1	141.6	153.5	163.1	148.2	148.9	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	
6/12/08	112.8	98.2	96.1	95.2	97.6	109.6	124.4	137.1	153.5	158.4	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1	
6/13/08	104.7	94.8	97.2	96.6	99.2	107.7	123.9	138.8	151.9	161.0	149.1	149.1	149.1	149.1	149.1	149.1	149.1	149.1	149.1	149.1	149.1	149.1	149.1	
6/14/08	103.4	99.2	96.8	96.4	100.2	103.6	125.6	145.8	154.3	164.1	149.7	149.7	149.7	149.7	149.7	149.7	149.7	149.7	149.7	149.7	149.7	149.7	149.7	
6/15/08	105.8	99.1	97.5	96.2	99.7	110.1	126.4	139.6	149.4	164.8	149.6	149.6	149.6	149.6	149.6	149.6	149.6	149.6	149.6	149.6	149.6	149.6	149.6	
6/16/08	105.8	101.6	100.8	97.2	101.2	109.4	125.5	145.9	154.8	164.9	144.9	144.9	144.9	144.9	144.9	144.9	144.9	144.9	144.9	144.9	144.9	144.9	144.9	
6/17/08	108.1	97.6	97																					



### Load Summary (continued)

Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR18	HR20	HR21	HR22	HR23	
7/17/06	1162.7	1165.5	1072.0	1057.3	1087.9	1177.1	1229.7	1427.6	1613.7	1732.9	1737.5	1812.6	1822.0	1811.3	1786.4	1786.4	1726.7	1849.9	1717.4	1811.6	1837.7	1257.1
7/22/06	1163.9	1168.9	1066.0	1047.4	1077.5	1177.0	1230.1	1430.0	1604.1	1772.2	1812.5	1834.4	1836.6	1842.3	1860.6	1853.3	1847.7	1864.4	1865.8	1864.0	1864.0	1301.0
7/26/06	1166.3	1170.2	1067.0	1062.8	1077.8	1180.5	1236.6	1435.7	1612.7	1784.8	1802.0	1822.6	1821.6	1827.3	1847.3	1840.0	1796.1	1841.4	1711.3	1866.7	1312.0	
7/31/06	1167.8	1171.3	1067.4	1063.8	1077.1	1182.5	1240.1	1438.8	1615.5	1805.9	1827.5	1827.4	1827.4	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
8/5/06	1168.8	1173.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
8/9/06	1169.8	1174.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
8/13/06	1170.8	1175.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
8/17/06	1171.8	1176.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
8/21/06	1172.8	1177.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
8/25/06	1173.8	1178.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
8/29/06	1174.8	1179.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
9/2/06	1175.8	1180.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
9/6/06	1176.8	1181.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
9/10/06	1177.8	1182.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
9/14/06	1178.8	1183.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
9/18/06	1179.8	1184.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
9/22/06	1180.8	1185.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
9/26/06	1181.8	1186.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
9/30/06	1182.8	1187.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
10/4/06	1183.8	1188.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
10/8/06	1184.8	1189.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
10/12/06	1185.8	1190.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
10/16/06	1186.8	1191.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
10/20/06	1187.8	1192.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
10/24/06	1188.8	1193.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
10/28/06	1189.8	1194.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
11/1/06	1190.8	1195.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
11/5/06	1191.8	1196.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
11/9/06	1192.8	1197.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
11/13/06	1193.8	1198.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
11/17/06	1194.8	1199.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
11/21/06	1195.8	1200.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
11/25/06	1196.8	1201.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
11/29/06	1197.8	1202.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
12/3/06	1198.8	1203.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
12/7/06	1199.8	1204.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
12/11/06	1200.8	1205.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
12/15/06	1201.8	1206.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
12/19/06	1202.8	1207.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
12/23/06	1203.8	1208.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
12/27/06	1204.8	1209.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
12/31/06	1205.8	1210.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
1/4/07	1206.8	1211.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
1/8/07	1207.8	1212.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
1/12/07	1208.8	1213.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
1/16/07	1209.8	1214.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
1/20/07	1210.8	1215.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
1/24/07	1211.8	1216.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
1/28/07	1212.8	1217.3	1067.4	1064.8	1076.5	1183.6	1241.6	1440.9	1616.5	1804.4	1828.1	1828.1	1828.1	1832.3	1852.3	1844.1	1797.6	1842.4	1717.1	1862.5	1322.8	
2/1/07	1213.8	1218.3	1067.4	1064.8	1076.5	1183.6																



## Load Summary (continued)

Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
9/1/08	104.9	101.5	99.2	99.5	99.8	107.8	109.5	113.6	128.2	148.5	154.7	154.3	152.9	154.0	159.1	178.0	183.0	162.9	163.7	176.6	164.1	146.0	125.8	102.1
9/2/08	103.5	99.7	97.9	97.6	99.4	107.0	120.2	128.3	153.4	148.5	164.1	172.4	174.3	174.5	175.1	176.4	174.0	174.0	171.0	174.0	167.0	148.5	128.2	102.1
9/3/08	106.1	101.0	98.5	98.0	99.8	106.2	120.5	133.3	149.9	161.7	168.5	171.7	174.7	176.2	175.1	173.6	170.6	168.8	171.7	183.5	165.2	150.5	129.3	114.1
9/4/08	104.9	100.8	98.9	98.6	102.0	109.0	121.6	136.0	152.6	164.5	170.0	172.7	174.8	177.0	175.9	175.4	171.8	164.9	168.9	172.8	163.1	148.8	130.9	115.8
9/5/08	104.9	100.8	98.9	98.1	100.1	107.5	120.1	137.6	153.8	165.8	172.5	176.6	178.5	177.1	175.9	175.4	171.8	164.9	168.9	172.8	163.1	148.8	130.9	115.8
9/6/08	105.4	101.9	99.7	98.8	99.9	103.7	107.3	117.5	135.9	148.5	160.9	155.3	158.1	154.2	157.1	154.1	151.9	154.9	162.9	166.2	155.8	142.7	125.5	113.8
9/7/08	104.4	100.2	98.3	97.0	98.8	102.6	107.8	116.6	134.5	142.1	148.3	149.6	149.0	149.1	148.3	150.4	152.9	154.3	160.3	161.9	158.4	142.4	124.4	111.0
9/8/08	103.2	99.5	97.8	97.3	99.8	107.0	112.9	116.3	135.1	142.7	147.8	149.1	149.1	149.1	148.3	150.4	152.9	154.3	160.3	161.9	158.4	142.4	124.4	111.0
9/9/08	103.2	99.5	97.8	97.3	99.8	107.0	112.9	116.3	135.1	142.7	147.8	149.1	149.1	149.1	148.3	150.4	152.9	154.3	160.3	161.9	158.4	142.4	124.4	111.0
9/10/08	102.8	94.5	96.1	97.0	98.6	106.1	118.7	132.5	147.1	157.9	164.5	168.7	167.6	167.6	167.2	166.8	167.6	168.8	166.7	172.7	162.9	147.5	125.6	110.4
9/11/08	102.4	94.5	96.1	97.0	98.6	106.1	118.7	132.5	147.1	157.9	164.5	168.7	167.6	167.6	167.2	166.8	167.6	168.8	166.7	172.7	162.9	147.5	125.6	110.4
9/12/08	104.2	100.5	98.5	98.0	100.8	108.6	121.9	138.1	154.4	161.1	167.4	169.1	169.7	170.3	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5
9/13/08	104.2	100.5	98.5	98.0	100.8	108.6	121.9	138.1	154.4	161.1	167.4	169.1	169.7	170.3	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5
9/14/08	104.4	101.7	100.0	99.0	100.5	108.0	120.7	130.5	149.0	159.2	166.5	168.7	169.7	169.7	169.1	169.6	169.6	169.6	169.6	169.6	169.6	169.6	169.6	169.6
9/15/08	104.4	101.7	100.0	99.0	100.5	108.0	120.7	130.5	149.0	159.2	166.5	168.7	169.7	169.7	169.1	169.6	169.6	169.6	169.6	169.6	169.6	169.6	169.6	169.6
9/16/08	104.8	102.4	100.4	99.5	101.0	109.2	123.4	140.5	158.1	168.9	175.7	176.6	177.5	177.5	176.9	176.4	174.0	174.0	171.0	174.0	167.0	148.5	128.2	102.1
9/17/08	103.5	99.7	97.9	97.6	99.4	107.0	120.2	128.3	153.4	148.5	164.1	172.4	174.3	174.5	175.1	176.4	174.0	174.0	171.0	174.0	167.0	148.5	128.2	102.1
9/18/08	106.1	101.0	98.5	98.0	99.8	106.2	120.5	133.3	149.9	161.7	168.5	171.7	174.7	176.2	175.1	173.6	170.6	168.8	171.7	183.5	165.2	150.5	129.3	114.1
9/19/08	104.9	100.8	98.9	98.6	102.0	109.0	121.6	136.0	152.6	164.5	170.0	172.7	174.8	177.0	175.9	175.4	171.8	164.9	168.9	172.8	163.1	148.8	130.9	115.8
9/20/08	104.9	100.8	98.9	98.1	100.1	107.5	120.1	137.6	153.8	165.8	172.5	176.6	178.5	177.1	175.9	175.4	171.8	164.9	168.9	172.8	163.1	148.8	130.9	115.8
9/21/08	105.4	101.9	99.7	98.8	99.9	103.7	107.3	117.5	135.9	148.5	160.9	155.3	158.1	154.2	157.1	154.1	151.9	154.9	162.9	166.2	155.8	142.7	125.5	113.8
9/22/08	104.4	100.2	98.3	97.0	98.8	102.6	107.8	116.6	134.5	142.1	148.3	149.6	149.0	149.1	148.3	150.4	152.9	154.3	160.3	161.9	158.4	142.4	124.4	111.0
9/23/08	103.2	99.5	97.8	97.3	99.8	107.0	112.9	116.3	135.1	142.7	147.8	149.1	149.1	149.1	148.3	150.4	152.9	154.3	160.3	161.9	158.4	142.4	124.4	111.0
9/24/08	103.2	99.5	97.8	97.3	99.8	107.0	112.9	116.3	135.1	142.7	147.8	149.1	149.1	149.1	148.3	150.4	152.9	154.3	160.3	161.9	158.4	142.4	124.4	111.0
9/25/08	102.8	94.5	96.1	97.0	98.6	106.1	118.7	132.5	147.1	157.9	164.5	168.7	167.6	167.6	167.2	166.8	167.6	168.8	166.7	172.7	162.9	147.5	125.6	110.4
9/26/08	102.4	94.5	96.1	97.0	98.6	106.1	118.7	132.5	147.1	157.9	164.5	168.7	167.6	167.6	167.2	166.8	167.6	168.8	166.7	172.7	162.9	147.5	125.6	110.4
9/27/08	104.2	100.5	98.5	98.0	100.8	108.6	121.9	138.1	154.4	161.1	167.4	169.1	169.7	170.3	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5
9/28/08	104.2	100.5	98.5	98.0	100.8	108.6	121.9	138.1	154.4	161.1	167.4	169.1	169.7	170.3	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5	170.5
9/29/08	104.8	102.4	100.4	99.5	101.0	109.2	123.4	140.5	158.1	168.9	175.7	176.6	177.5	177.5	176.9	176.4	174.0	174.0	171.0	174.0	167.0	148.5	128.2	102.1
9/30/08	104.6	101.2	99.4	99.2	101.6	109.9	124.8	133.5	147.4	159.0	164.0	166.1	166.4	166.4	166.8	167.4	164.0	162.4	162.4	162.4	162.4	162.4	162.4	162.4
10/1/08	102.0	98.5	96.7	96.5	98.3	107.0	122.0	134.4	148.2	162.9	163.9	166.4	166.4	167.6	167.4	169.5	167.6	164.0	164.0	164.0	164.0	164.0	164.0	164.0
10/2/08	106.4	101.7	99.0	98.7	99.3	108.1	120.6	135.2	150.3	161.1	165.9	167.4	167.6	170.4	169.4	168.1	165.0	160.9	167.8	164.4	165.7	146.9	130.1	116.4
10/3/08	104.9	101.5	99.8	99.7	100.2	108.0	110.5	122.6	139.8	151.4	164.4	166.0	166.1	168.5	165.7	165.8	156.7	156.2	161.9	166.2	162.1	147.1	134.8	110.9
10/4/08	106.5	101.9	99.8	99.6	99.7	109.2	120.8	110.5	122.6	139.8	151.4	164.4	166.0	166.1	168.5	165.7	156.7	156.2	161.9	166.2	162.1	147.1	134.8	110.9
10/5/08	104.9	101.5	99.8	99.6	99.7	109.2	120.8	110.5	122.6	139.8	151.4	164.4	166.0	166.1	168.5	165.7	156.7	156.2	161.9	166.2	162.1	147.1	134.8	110.9
10/6/08	104.0	101.3	99.0	98.7	100.2	106.7	118.5	113.0	120.9	137.0	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1	148.1
10/7/08	104.7	99.2	97.2	97.0	101.0	108.7	114.4	138.8	145.8	159.3	163.4	168.1	167.1	168.9	170.8	170.8	169.4	168.5	168.5	168.5	168.5	168.5	168.5	168.5
10/8/08	103.2	99.5	97.8	97.3	99.8	107.0	112.9	116.3	135.1	142.7	147.8	149.1	149.1	149.1	148.3	150.4	152.9	154.3	160.3	161.9	158.4	142.4	124.4	111.0
10/9/08	103.2	99.5	97.8	97.3	99.8	107.0	112.9	116.3	135.1	142.7	147.8	149.1	149.1	149.1	148.3	150.4	152.9	154.3	160.3	161.9	158.4	142.4	124.4	111.0
10/10/08	103.2	99.5	97.8	97.3	99.8	107.0	112.9	116.3	135.1	142.7	147.8	149.1	149.1	149.1	148.3	150.4	152.9	154.3	160.3	161.9	158.4	142.4	124.4	111.0
10/11/08	103.2	99.5	97.8	97.3	99.8	107.0	112.9	116.3	135.1	142.7	147.8	149.1	149.1	149.1	148.3	150.4	152.9	154.3	160.3	161.9	158.4	142.4	124.4	111.0
10/12/08	103.2	99.5	97.8	97.3	99.8	107.0	112.9	116.3	135.1	142.7	147.8	149.1	149.1	149.1	148.3	150.4	152.9	154.3	160.3	161.9	158.4	142.4	124.4	111.0
10/13/08	103.0	98.6	96.4	96.5	97.5	106.1	120.6	128.4	142.8	152.5	162.1	168.1	167.4	167.6	167.6	167.6	167.6	167.6	167.6	167.6	167.6	167.6	167.6	167.6
10/14/08	103.8	100.3	100.1	100.1	100.1	124.2	126.4	135.9	150.4	162.9	164.3	167.0	167.0	168.3	167.6	170.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3	168.3
10/15/08	104.7	101.3	99.3	99.3	100.7	120.9	122.8	136.9	152.1	164.7	168.1	170.3	170.3	170.3	170.3	170.3	170.3	170.3	170.3	170.3	170.3	170.3	170.3	170.3
10/16/08	105.7	101.4	99.3	99.3	101.2	120.9	122.8	136.9	152.1	164.7	168.1	170.3	170.3	170.3	170.3	170.3	170.3	170.3	170.3	170.3	170.3	170.3	170.3	170.3
10/17/08	104.8	101.2	99.2	99.2	99.7	120.3	120.8	119.1	127.6	137.8	149.0	155.5	155.5	156.2	156.2	156.2	156.2	156.2	156.2	156.2	156.2	156.2	156.2	156.2
10/18/08	104.0	98.6	96.4	96.5	97.5	106.1	120.6	128.4	142.8	152.5	162.1	168.1	167.4	167.6	167.6	167.6	167.6	167.6	167.6	167.6	167.6	167.6	167.6	167.6
10/19/08	103.4	98.0	95.4																					



### Load Summary (continued)

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## Hourly Transaction Pattern 5

Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
1/1/04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	26.778	28.937	28.919	28.186	29.494	28.949	28.945	29.340	29.875	29.073	30.120	30.064	31.105	30.120	0.0000	0.0000	0.0000
1/2/04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	26.783	29.126	28.916	28.186	29.494	28.949	28.945	29.340	29.875	29.073	30.120	30.064	31.105	30.120	0.0000	0.0000	0.0000
1/3/04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	26.788	29.312	28.916	28.186	29.494	28.949	28.945	29.340	29.875	29.073	30.120	30.064	31.105	30.120	0.0000	0.0000	0.0000
1/4/04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	26.793	29.498	28.916	28.186	29.494	28.949	28.945	29.340	29.875	29.073	30.120	30.064	31.105	30.120	0.0000	0.0000	0.0000
1/5/04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	26.798	29.684	28.916	28.186	29.494	28.949	28.945	29.340	29.875	29.073	30.120	30.064	31.105	30.120	0.0000	0.0000	0.0000
1/6/04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	26.803	29.870	28.916	28.186	29.494	28.949	28.945	29.340	29.875	29.073	30.120	30.064	31.105	30.120	0.0000	0.0000	0.0000
1/7/04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	26.808	30.056	28.916	28.186	29.494	28.949	28.945	29.340	29.875	29.073	30.120	30.064	31.105	30.120	0.0000	0.0000	0.0000
1/8/04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	26.813	30.242	28.916	28.186	29.494	28.949	28.945	29.340	29.875	29.073	30.120	30.064	31.105	30.120	0.0000	0.0000	0.0000
1/9/04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	26.818	30.428	28.916	28.186	29.494	28.949	28.945	29.340	29.875	29.073	30.120	30.064	31.105	30.120	0.0000	0.0000	0.0000
1/10/04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	26.823	30.614	28.916	28.186	29.494	28.949	28.945	29.340	29.875	29.073	30.120	30.064	31.105	30.120	0.0000	0.0000	0.0000
1/11/04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	26.828	30.800	28.916	28.186	29.494	28.949	28.945	29.340	29.875	29.073	30.120	30.064	31.105	30.120	0.0000	0.0000	0.0000
1/12/04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	26.833	30.986	28.916	28.186	29.494	28.949	28.945	29.340	29.875	29.073	30.120	30.064	31.105	30.120	0.0000	0.0000	0.0000
1/13/04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	26.838	31.172	28.916	28.186	29.494	28.949	28.945	29.340	29.875	29.073	30.120	30.064	31.105	30.120	0.0000	0.0000	0.0000
1/14/04	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	26.843	31.358	28.916	28.186	29.494	28.949	28.945	29.340	29.875	29.073	30.120	30.064	31.105	30.120	0.0000	0.0000	0.

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File PTNS HTR



**Hourly Transaction Pattern 5 (continued)**

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**Hourly Transaction Pattern 5 (continued)**

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**Hourly Transaction Pattern 5 (continued)**

Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17A	HR18	HR19	HR20	HR21	HR22	HR23	HR24	HR25	HR26	HR27	HR28	HR29	HR30	HR31	HR32	HR33	HR34	HR35	HR36	HR37	HR38	HR39	HR40	HR41	HR42	HR43	HR44	HR45	HR46	HR47	HR48	HR49	HR50	HR51	HR52	HR53	HR54	HR55	HR56	HR57	HR58	HR59	HR60	HR61	HR62	HR63	HR64	HR65	HR66	HR67	HR68	HR69	HR70	HR71	HR72	HR73	HR74	HR75	HR76	HR77	HR78	HR79	HR80	HR81	HR82	HR83	HR84	HR85	HR86	HR87	HR88	HR89	HR90	HR91	HR92	HR93	HR94	HR95	HR96	HR97	HR98	HR99	HR100	HR101	HR102	HR103	HR104	HR105	HR106	HR107	HR108	HR109	HR110	HR111	HR112	HR113	HR114	HR115	HR116	HR117	HR118	HR119	HR120	HR121	HR122	HR123	HR124	HR125	HR126	HR127	HR128	HR129	HR130	HR131	HR132	HR133	HR134	HR135	HR136	HR137	HR138	HR139	HR140	HR141	HR142	HR143	HR144	HR145	HR146	HR147	HR148	HR149	HR150	HR151	HR152	HR153	HR154	HR155	HR156	HR157	HR158	HR159	HR160	HR161	HR162	HR163	HR164	HR165	HR166	HR167	HR168	HR169	HR170	HR171	HR172	HR173	HR174	HR175	HR176	HR177	HR178	HR179	HR180	HR181	HR182	HR183	HR184	HR185	HR186	HR187	HR188	HR189	HR190	HR191	HR192	HR193	HR194	HR195	HR196	HR197	HR198	HR199	HR200	HR201	HR202	HR203	HR204	HR205	HR206	HR207	HR208	HR209	HR210	HR211	HR212	HR213	HR214	HR215	HR216	HR217	HR218	HR219	HR220	HR221	HR222	HR223	HR224	HR225	HR226	HR227	HR228	HR229	HR230	HR231	HR232	HR233	HR234	HR235	HR236	HR237	HR238	HR239	HR240	HR241	HR242	HR243	HR244	HR245	HR246	HR247	HR248	HR249	HR250	HR251	HR252	HR253	HR254	HR255	HR256	HR257	HR258	HR259	HR260	HR261	HR262	HR263	HR264	HR265	HR266	HR267	HR268	HR269	HR270	HR271	HR272	HR273	HR274	HR275	HR276	HR277	HR278	HR279	HR280	HR281	HR282	HR283	HR284	HR285	HR286	HR287	HR288	HR289	HR290	HR291	HR292	HR293	HR294	HR295	HR296	HR297	HR298	HR299	HR300	HR301	HR302	HR303	HR304	HR305	HR306	HR307	HR308	HR309	HR310	HR311	HR312	HR313	HR314	HR315	HR316	HR317	HR318	HR319	HR320	HR321	HR322	HR323	HR324	HR325	HR326	HR327	HR328	HR329	HR330	HR331	HR332	HR333	HR334	HR335	HR336	HR337	HR338	HR339	HR340	HR341	HR342	HR343	HR344	HR345	HR346	HR347	HR348	HR349	HR350	HR351	HR352	HR353	HR354	HR355	HR356	HR357	HR358	HR359	HR360	HR361	HR362	HR363	HR364	HR365	HR366	HR367	HR368	HR369	HR370	HR371	HR372	HR373	HR374	HR375	HR376	HR377	HR378	HR379	HR380	HR381	HR382	HR383	HR384	HR385	HR386	HR387	HR388	HR389	HR390	HR391	HR392	HR393	HR394	HR395	HR396	HR397	HR398	HR399	HR400	HR401	HR402	HR403	HR404	HR405	HR406	HR407	HR408	HR409	HR410	HR411	HR412	HR413	HR414	HR415	HR416	HR417	HR418	HR419	HR420	HR421	HR422	HR423	HR424	HR425	HR426	HR427	HR428	HR429	HR430	HR431	HR432	HR433	HR434	HR435	HR436	HR437	HR438	HR439	HR440	HR441	HR442	HR443	HR444	HR445	HR446	HR447	HR448	HR449	HR450	HR451	HR452	HR453	HR454	HR455	HR456	HR457	HR458	HR459	HR460	HR461	HR462	HR463	HR464	HR465	HR466	HR467	HR468	HR469	HR470	HR471	HR472	HR473	HR474	HR475	HR476	HR477	HR478	HR479	HR480	HR481	HR482	HR483	HR484	HR485	HR486	HR487	HR488	HR489	HR490	HR491	HR492	HR493	HR494	HR495	HR496	HR497	HR498	HR499	HR500	HR501	HR502	HR503	HR504	HR505	HR506	HR507	HR508	HR509	HR510	HR511	HR512	HR513	HR514	HR515	HR516	HR517	HR518	HR519	HR520	HR521	HR522	HR523	HR524	HR525	HR526	HR527	HR528	HR529	HR530	HR531	HR532	HR533	HR534	HR535	HR536	HR537	HR538	HR539	HR540	HR541	HR542	HR543	HR544	HR545	HR546	HR547	HR548	HR549	HR550	HR551	HR552	HR553	HR554	HR555	HR556	HR557	HR558	HR559	HR560	HR561	HR562	HR563	HR564	HR565	HR566	HR567	HR568	HR569	HR570	HR571	HR572	HR573	HR574	HR575	HR576	HR577	HR578	HR579	HR580	HR581	HR582	HR583	HR584	HR585	HR586	HR587	HR588	HR589	HR590	HR591	HR592	HR593	HR594	HR595	HR596	HR597	HR598	HR599	HR600	HR601	HR602	HR603	HR604	HR605	HR606	HR607	HR608	HR609	HR610	HR611	HR612	HR613	HR614	HR615	HR616	HR617	HR618	HR619	HR620	HR621	HR622	HR623	HR624	HR625	HR626	HR627	HR628	HR629	HR630	HR631	HR632	HR633	HR634	HR635	HR636	HR637	HR638	HR639	HR640	HR641	HR642	HR643	HR644	HR645	HR646	HR647	HR648	HR649	HR650	HR651	HR652	HR653	HR654	HR655	HR656	HR657	HR658	HR659	HR660	HR661	HR662	HR663	HR664	HR665	HR666	HR667	HR668	HR669	HR670	HR671	HR672	HR673	HR674	HR675	HR676	HR677	HR678	HR679	HR680	HR681	HR682	HR683	HR684	HR685	HR686	HR687	HR688	HR689	HR690	HR691	HR692	HR693	HR694	HR695	HR696	HR697	HR698	HR699	HR700	HR701	HR702	HR703	HR704	HR705	HR706	HR707	HR708	HR709	HR710	HR711	HR712	HR713	HR714	HR715	HR716	HR717	HR718	HR719	HR720	HR721	HR722	HR723	HR724	HR725	HR726	HR727	HR728	HR729	HR730	HR731	HR732	HR733	HR734	HR735	HR736	HR737	HR738	HR739	HR740	HR741	HR742	HR743	HR744	HR745	HR746	HR747	HR748	HR749	HR750	HR751	HR752	HR753	HR754	HR755	HR756	HR757	HR758	HR759	HR760	HR761	HR762	HR763	HR764	HR765	HR766	HR767	HR768	HR769	HR770	HR771	HR772	HR773	HR774	HR775	HR776	HR777	HR778	HR779	HR780	HR781	HR782	HR783	HR784	HR785	HR786	HR787	HR788	HR789	HR790	HR791	HR792	HR793	HR794	HR795	HR796	HR797	HR798	HR799	HR800	HR801	HR802	HR803	HR804	HR805	HR806	HR807	HR808	HR809	HR810	HR811	HR812	HR813	HR814	HR815	HR816	HR817	HR818	HR819	HR820	HR821	HR822	HR823	HR824	HR825	HR826	HR827	HR828	HR829	HR830	HR831	HR832	HR833	HR834	HR835	HR836	HR837	HR838	HR839	HR840	HR841	HR842	HR843	HR844	HR845	HR846	HR847	HR848	HR849	HR850	HR851	HR852	HR853	HR854	HR855	HR856	HR857	HR858	HR859	HR860	HR861	HR862	HR863	HR864	HR865	HR866	HR867	HR868	HR869	HR870	HR871	HR872	HR873	HR874	HR875	HR876	HR877	HR878	HR879	HR880	HR881	HR882	HR883	HR884	HR885	HR886	HR887	HR888	HR889	HR890	HR891	HR892	HR893	HR894	HR895	HR896	HR897	HR898	HR899	HR900	HR901	HR902	HR903	HR904	HR905	HR906	HR907	HR908	HR909	HR910	HR911	HR912	HR913	HR914	HR915	HR916	HR917	HR918	HR919	HR920	HR921	HR922	HR923	HR924	HR925	HR926	HR927	HR928	HR929	HR930	HR931	HR932	HR933	HR934	HR935	HR936	HR937	HR938	HR939	HR940	HR941	HR942	HR943	HR944	HR945	HR946	HR947	HR948	HR949	HR950	HR951	HR952	HR953	HR954	HR955	HR956	HR957	HR958	HR959	HR960	HR961	HR962	HR963	HR964	HR965	HR966	HR967	HR968	HR969	HR970	HR971	HR972	HR973	HR974	HR975	HR976	HR977	HR978	HR979	HR980	HR981	HR982	HR983	HR984	HR985	HR986	HR987	HR988	HR989	HR990	HR991	HR992	HR993	HR994	HR995	HR996	HR997	HR998	HR999	HR1000
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**Hourly Transaction Pattern 5 (continued)**

[illegible]



Hourly Transaction Pattern 5 (continued)

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## Page 41 of 75

### Hourly Transaction Pattern 6

Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
1/17/08	4.5001	4.5032	15.4535	10.9242	11.4300	16.3774	21.0777	9.3000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/27/08	19.5960	12.2595	9.9595	9.9595	10.8660	21.6640	27.6640	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/30/08	21.4310	12.9940	10.4430	10.4430	12.5170	22.3170	27.9860	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	20.3947	12.5570	9.5840	9.5840	12.5170	22.3170	27.9860	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	4.4170	12.6590	11.7810	11.7810	11.9110	19.1610	19.1610	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1/31/08	9.9920	12.6600	12.6600	12.6600	12.6600	12.6600	12.6600	9.2000	5.0000	0.0000	0.0000	0.0000	0.0000	3.0000	3.00									

PPLT'S program licensed to HECCO



**Hourly Transaction Pattern 6 (continued)**

Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
3/1/24	27,000	42,000	30,000	45,000	35,000	40,000	38,000	41,000	39,000	43,000	44,000	42,000	46,000	47,000	45,000	49,000	50,000	48,000	52,000	53,000	51,000	55,000	56,000	54,000
3/2/24	28,000	43,000	31,000	46,000	36,000	41,000	39,000	42,000	40,000	44,000	45,000	43,000	47,000	48,000	46,000	50,000	51,000	49,000	53,000	54,000	52,000	56,000	57,000	
3/3/24	29,000	44,000	32,000	47,000	37,000	42,000	40,000	43,000	41,000	45,000	46,000	44,000	48,000	49,000	47,000	51,000	52,000	50,000	54,000	55,000	53,000	57,000	58,000	
3/4/24	30,000	45,000	33,000	48,000	38,000	43,000	41,000	44,000	42,000	46,000	47,000	45,000	49,000	50,000	48,000	52,000	53,000	51,000	55,000	56,000	54,000	58,000	59,000	
3/5/24	31,000	46,000	34,000	49,000	39,000	44,000	42,000	45,000	43,000	47,000	48,000	46,000	50,000	51,000	49,000	53,000	54,000	52,000	56,000	57,000	55,000	59,000	60,000	
3/6/24	32,000	47,000	35,000	50,000	40,000	45,000	43,000	46,000	44,000	48,000	49,000	47,000	51,000	52,000	50,000	54,000	55,000	53,000	57,000	58,000	56,000	60,000	61,000	
3/7/24	33,000	48,000	36,000	51,000	41,000	46,000	44,000	47,000	45,000	49,000	50,000	48,000	52,000	53,000	51,000	55,000	56,000	54,000	58,000	59,000	57,000	61,000	62,000	
3/8/24	34,000	49,000	37,000	52,000	42,000	47,000	45,000	48,000	46,000	50,000	51,000	49,000	53,000	54,000	52,000	56,000	57,000	55,000	59,000	60,000	58,000	62,000	63,000	
3/9/24	35,000	50,000	38,000	53,000	43,000	48,000	46,000	49,000	47,000	51,000	52,000	50,000	54,000	55,000	53,000	57,000	58,000	56,000	60,000	61,000	59,000	63,000	64,000	
3/10/24	36,000	51,000	39,000	54,000	44,000	49,000	47,000	50,000	48,000	52,000	53,000	51,000	55,000	56,000	54,000	58,000	59,000	57,000	61,000	62,000	60,000	64,000	65,000	
3/11/24	37,000	52,000	40,000	55,000	45,000	50,000	48,000	51,000	49,000	53,000	54,000	52,000	56,000	57,000	55,000	59,000	60,000	58,000	62,000	63,000	61,000	65,000	66,000	
3/12/24	38,000	53,000	41,000	56,000	46,000	51,000	49,000	52,000	50,000	54,000	55,000	53,000	57,000	58,000	56,000	60,000	61,000	59,000	63,000	64,000	62,000	66,000	67,000	
3/13/24	39,000	54,000	42,000	57,000	47,000	52,000	50,000	53,000	51,000	55,000	56,000	54,000	58,000	59,000	57,000	61,000	62,000	60,000	64,000	65,000	63,000	67,000	68,000	
3/14/24	40,000	55,000	43,000	58,000	48,000	53,000	51,000	54,000	52,000	56,000	57,000	55,000	59,000	60,000	58,000	62,000	63,000	61,000	65,000	66,000	64,000	68,000	69,000	
3/15/24	41,000	56,000	44,000	59,000	49,000	54,000	52,000	55,000	53,000	57,000	58,000	56,000	60,000	61,000	59,000	63,000	64,000	62,000	66,000	67,000	65,000	69,000	70,000	
3/16/24	42,000	57,000	45,000	60,000	50,000	55,000	53,000	56,000	54,000	58,000	59,000	57,000	61,000	62,000	60,000	64,000	65,000	63,000	67,000	68,000	66,000	70,000	71,000	
3/17/24	43,000	58,000	46,000	61,000	51,000	56,000	54,000	57,000	55,000	59,000	60,000	58,000	62,000	63,000	61,000	65,000	66,000	64,000	68,000	69,000	67,000	71,000	72,000	
3/18/24	44,000	59,000	47,000	62,000	52,000	57,000	55,000	58,000	56,000	60,000	61,000	59,000	63,000	64,000	62,000	66,000	67,000	65,000	69,000	70,000	68,000	72,000	73,000	
3/19/24	45,000	60,000	48,000	63,000	53,000	58,000	56,000	59,000	57,000	61,000	62,000	60,000	64,000	65,000	63,000	67,000	68,000	66,000	70,000	71,000	69,000	73,000	74,000	
3/20/24	46,000	61,000	49,000	64,000	54,000	59,000	57,000	60,000	58,000	62,000	63,000	61,000	65,000	66,000	64,000	68,000	69,000	67,000	71,000	72,000	70,000	74,000	75,000	
3/21/24	47,000	62,000	50,000	65,000	55,000	60,000	58,000	61,000	59,000	63,000	64,000	62,000	66,000	67,000	65,000	69,000	70,000	68,000	72,000	73,000	71,000	75,000	76,000	
3/22/24	48,000	63,000	51,000	66,000	56,000	61,000	59,000	62,000	60,000	64,000	65,000	63,000	67,000	68,000	66,000	70,000	71,000	69,000	73,000	74,000	72,000	76,000	77,000	
3/23/24	49,000	64,000	52,000	67,000	57,000	62,000	60,000	63,000	61,000	65,000	66,000	64,000	68,000	69,000	67,000	71,000	72,000	70,000	74,000	75,000	73,000	77,000	78,000	
3/24/24	50,000	65,000	53,000	68,000	58,000	63,000	61,000	64,000	62,000	66,000	67,000	65,000	69,000	70,000	68,000	72,000	73,000	71,000	75,000	76,000	74,000	78,000	79,000	



## Page 43 of 75

**Hourly Transaction Pattern 6 (continued)**

Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24
5/1/08	10.25	10.35	10.00	9.50	11.25	10.30	10.20	10.30	10.30	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20
5/2/08	10.30	10.35	10.00	9.50	11.25	10.30	10.20	10.30	10.30	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20
5/3/08	10.35	10.40	10.00	9.50	11.30	10.35	10.25	10.35	10.35	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25
5/4/08	10.40	10.45	10.00	9.50	11.35	10.40	10.30	10.40	10.40	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30	10.30
5/5/08	10.45	10.50	10.00	9.50	11.40	10.45	10.35	10.45	10.45	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35	10.35
5/6/08	10.50	10.55	10.00	9.50	11.45	10.50	10.40	10.50	10.50	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40	10.40
5/7/08	10.55	11.00	10.00	9.50	11.50	10.55	10.45	11.00	10.55	10.45	10.45	10.45	10.45	10.45	10.45	10.45	10.45	10.45	10.45	10.45	10.45	10.45	10.45	10.45
5/8/08	11.00	11.05	10.00	9.50	11.55	11.00	10.50	11.05	11.00	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50	10.50
5/9/08	11.05	11.10	10.00	9.50	12.00	11.05	10.55	11.10	11.05	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55
5/10/08	11.10	11.15	10.00	9.50	12.05	11.10	10.60	11.15	11.10	10.60	10.60	10.60	10.60	10.60	10.60	10.60	10.60	10.60	10.60	10.60	10.60	10.60	10.60	10.60
5/11/08	11.15	11.20	10.00	9.50	12.10	11.15	10.65	11.20	11.15	10.65	10.65	10.65	10.65	10.65	10.65	10.65	10.65	10.65	10.65	10.65	10.65	10.65	10.65	10.65
5/12/08	11.20	11.25	10.00	9.50	12.15	11.20	10.70	11.25	11.20	10.70	10.70	10.70	10.70	10.70	10.70	10.70	10.70	10.70	10.70	10.70	10.70	10.70	10.70	10.70
5/13/08	11.25	11.30	10.00	9.50	12.20	11.25	10.75	11.30	11.25	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75	10.75
5/14/08	11.30	11.35	10.00	9.50	12.25	11.30	10.80	11.35	11.30	10.80	10.80	10.80	10.80	10.80	10.80	10.80	10.80	10.80	10.80	10.80	10.80	10.80	10.80	10.80
5/15/08	11.35	11.40	10.00	9.50	12.30	11.35	10.85	11.40	11.35	10.85	10.85	10.85	10.85	10.85	10.85	10.85	10.85	10.85	10.85	10.85	10.85	10.85	10.85	10.85
5/16/08	11.40	11.45	10.00	9.50	12.35	11.40	10.90	11.45	11.40	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90	10.90
5/17/08	11.45	11.50	10.00	9.50	12.40	11.45	10.95	11.50	11.45	10.95	10.95	10.95	10.95	10.95	10.95	10.95	10.95	10.95	10.95	10.95	10.95	10.95	10.95	10.95
5/18/08	11.50	11.55	10.00	9.50	12.45	11.50	11.00	11.55	11.50	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
5/19/08	11.55	12.00	10.00	9.50	12.50	11.55	11.05	12.00	11.55	11.05	11.05	11.05	11.05	11.05	11.05	11.05	11.05	11.05	11.05	11.05	11.05	11.05	11.05	11.05
5/20/08	12.00	12.05	10.00	9.50	12.55	12.00	11.10	12.05	12.00	11.10	11.10	11.10	11.10	11.10	11.10	11.10	11.10	11.10	11.10	11.10	11.10	11.10	11.10	11.10
5/21/08	12.05	12.10	10.00	9.50	13.00	12.05	11.15	12.10	12.05	11.15	11.15	11.15	11.15	11.15	11.15	11.15	11.15	11.15	11.15	11.15	11.15	11.15	11.15	11.15
5/22/08	12.10	12.15	10.00	9.50	13.05	12.10	11.20	12.15	12.10	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20	11.20
5/23/08	12.15	12.20	10.00	9.50	13.10	12.15	11.25	12.20	12.15	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25
5/24/08	12.20	12.25	10.00	9.50	13.15	12.20	11.30	12.25	12.20	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30
5/25/08	12.25	12.30	10.00	9.50	13.20	12.25	11.35	12.30	12.25	11.35	11.35	11.35	11.35	11.35	11.35	11.35	11.35	11.35	11.35	11.35	11.35	11.35	11.35	11.35
5/26/08	12.30	12.35	10.00	9.50	13.25	12.30	11.40	12.35	12.30	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.40	11.40
5/27/08	12.35	12.40	10.00	9.50	13.30	12.35	11.45	12.40	12.35	11.45	11.45	11.45	11.45	11.45	11.45	11.45	11.45	11.45	11.45	11.45	11.45	11.45	11.45	11.45
5/28/08	12.40	12.45	10.00	9.50	13.35	12.40	11.50	12.45	12.40	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50
5/29/08	12.45	12.50	10.00	9.50	13.40	12.45	11.55	12.50	12.45	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55
5/30/08	12.50	12.55	10.00	9.50	13.45	12.50	11.60	12.55	12.50	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60	11.60
5/31/08	12.55	13.00	10.00	9.50	13.50	12.55	11.65	13.00	12.55	11.65	11.65	11.65	11.65	11.65	11.65	11.65	11.65	11.65	11.65	11.65	11.65	11.65	11.65	11.65
6/1/08	13.00	13.05	10.00	9.50	13.55	13.00	11.70	13.05	13.00	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70
6/2/08	13.05	13.10	10.00	9.50	14.00	13.05	11.75	13.10	13.05	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75
6/3/08	13.10	13.15	10.00	9.50	14.05	13.10	11.80	13.15	13.10	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80	11.80
6/4/08	13.15	13.20	10.00	9.50	14.10	13.15	11.85	13.20	13.15	11.85	11.85	11.85	11.85	11.85	11.85	11.85	11.85	11.85	11.85	11.85	11.85	11.85	11.85	11.85
6/5/08	13.20	13.25	10.00	9.50	14.15	13.20	11.90	13.25	13.20	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90	11.90
6/6/08	13.25	13.30	10.00	9.50	14.20	13.25	11.95	13.30	13.25	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95
6/7/08	13.30	13.35	10.00	9.50	14.25	13.30	12.00	13.35	13.30	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
6/8/08	13.35	13.40	10.00	9.50	14.30	13.35	12.05	13.40	13.35	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05	12.05
6/9/08	13.40	13.45	10.00	9.50	14.35	13.40	12.10	13.45	13.40	12.10	12.10	12.10	12.10	12.10	12.10	12.10	12.10	12.10	12.10	12.10	12.10	12.10	12.10	12.10
6/10/08	13.45	13.50	10.00	9.50	14.40	13.45	12.15	13.50	13.45	12.15	12.15	12.15	12.15	12.15	12.15	12.15	12.15	12.15	12.15	12.15	12.15	12.15	12.15	12.15
6/11/08	13.50	13.55	10.00	9.50	14.45	13.50	12.20	13.55	13.50	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20	12.20
6/12/08	13.55	14.00	10.00	9.50	14.50	13.55	12.25	14.00	13.55	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25
6/13/08	14.00	14.05	10.00	9.50	14.55	14.00	12.30	14.05	14.00	12.30	12.30	12.30	12.30	12.30	12.30	12.30	12.30	12.30	12.30	12.30	12.30	12.30	12.30	12.30
6/14/08	14.05	14.10	10.00	9.50	15.00	14.05	12.35	14.10	14.05	12.35	12.35	12.35	12.35	12.35	12.35	12.35	12.35	12.35	12.35	12.35	12.35	12.35	12.35	12.35
6/15/08	14.10	14.15	10.00	9.50	15.05	14.10	12.40	14.15	14.10	12.40	12.40	12.40	12.40	12.40	12.40	12.40	12.40	12.40	12.40	12.40	12.40	12.40	12.40	12.40
6/16/08	14.15	14.20	10.00	9.50	15.10	14.15	12.45	14.20	14.15	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45
6/17/08	14.20	14.25	10.00	9.50	15.15	14.20	12.50	14.25	14.20	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50			

PPLUS program licensed to HFCO



## Hourly Transaction Pattern 6 (continued)

[illegible]



Hourly Transaction Pattern 6 (continued)

Date	HR1	HR2	HR3	HR4	HR5	HR6	HR7	HR8	HR9	HR10	HR11	HR12	HR13	HR14	HR15	HR16	HR17	HR18	HR19	HR20	HR21	HR22	HR23	HR24	
9/1/08	29,544	25,972	22,375	20,733	22,903	24,467	24,840	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	28,218	19,921	21,804	
9/2/08	22,305	16,320	13,648	12,735	16,538	24,657	20,273	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	27,348	25,241	24,920	
9/3/08	24,286	20,335	16,408	15,611	18,338	21,924	16,965	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9/4/08	0.132	0.013	3,975	8,785	8,785	8,785	8,785	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5,541	15,599	23,553	
9/5/08	20,198	18,163	17,284	16,642	19,571	25,163	25,925	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	12,339	18,547	21,540	
9/6/08	13,633	18,157	17,615	19,344	22,305	20,875	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	29,657	29,673	29,515	
9/7/08	26,388	19,531	16,453	14,751	17,256	21,657	25,115	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	28,278	28,571	29,346	
9/8/08	24,757	18,658	15,766	15,129	18,743	26,054	26,788	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	26,697	27,478	27,141	
9/9/08	24,517	18,415	15,484	14,606	16,783	21,036	20,321	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	23,334	24,252	25,566	
9/10/08	23,530	18,604	16,185	14,600	17,946	19,947	20,922	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	24,255	16,960	14,250	
9/11/08	9,680	8,376	6,394	6,236	1,169	0.000	2,057	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15,785	4,703	0.000	
9/12/08	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9/13/08	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9/14/08	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9/15/08	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9/16/08	20,692	18,443	15,382	14,591	17,462	24,176	24,312	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	27,440	27,311	28,262
9/17/08	20,447	18,205	15,545	14,725	15,451	23,808	27,635	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	21,310	22,116	18,639
9/18/08	12,792	17,095	10,638	11,882	12,395	6,949	9,477	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9/19/08	0.000	0.000	0.000	0.000	0.000	0.000	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9/20/08	4,794	6,570	2,936	7,800	6,792	5,876	13,800	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	29,226	21,911	16,995
9/21/08	19,491	21,565	19,076	18,128	17,864	20,454	25,117	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	24,271	19,962	11,142
9/22/08	6,058	4,791	3,314	0.044	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	29,145	26,281	26,038
9/23/08	25,943	19,924	18,957	18,220	20,848	27,408	29,519	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	26,982	24,256	19,930
9/24/08	9,422	0.397	0.589	1,200	1,998	10,565	14,547	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	23,357	27,361	25,446	
9/25/08	25,808	20,762	18,604	17,716	18,380	22,790	21,175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3,875	0.532	11,533
9/26/08	15,612	1,134	0.139	0.142	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2,451	0.610	0.000
9/27/08	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9/28/08	1,625	3,448	0.466	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9/29/08	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
9/30/08	5,632	9,864	17,924	2,478	3,799	5,784	10,216	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10/1/08	26,417	16,912	14,455	14,605	16,767	24,879	24,917	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	29,566	28,481	29,232
10/2/08	28,375	28,583	19,089	14,651	17,857	20,119	12,188	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10/3/08	11,312	11,955	13,898	11,460	11,945	18,607	25,043	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10/4/08	26,917	23,039	15,800	17,812	17,820	24,469	25,840	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	27,639	27,040	27,705
10/5/08	17,659	7,718	10,782	7,426	3,663	6,677	9,369	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	26,539	18,684	0.000
10/6/08	0.583	4,980	8,770	8,858	15,237	10,225	43,770	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10/7/08	0.826	1,942	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10/8/08	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10/9/08	11,718	10,349	6,999	6,432	7,950	8,373	13,463	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10/10/08	14,513	6,093	1,522	0.948	0.422	1,175	3,182	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	29,708	28,199	29,478
10/11/08	25,310	21,570	17,583	15,602	16,295	19,332	24,029	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	26,929	25,153	23,980
10/12/08	17,391	15,108	13,870	12,436	13,885	17,577	20,907	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	29,491	29,478	29,188
10/13/08	3,100	3,508	0.000	0.000	0.000	0.022	0.347	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	29,629	29,425	26,381
10/14/08	0.000	0.000	0.000	0.000	0.000	0.082	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10/15/08	0.000	0.000	0.000	0.000	0.000	0.076	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
10/16/08	0.000	0.000	0.000	0.000	0.00																				



Hourly Transaction Pattern 6 (continued)

[illegible]



## Hourly Capacity Pattern 17

2008										2009										2010										2011										2012										2013										2014										2015										2016										2017										2018										2019										2020										2021										2022										2023										2024										2025										2026										2027										2028										2029										2030										2031										2032										2033										2034										2035										2036										2037										2038										2039										2040										2041										2042										2043										2044										2045										2046										2047										2048										2049										2050										2051										2052																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Yr	Prd	Day	Hr	Cap	OM	Y



MECO Calibration Factor Report  
Year 2008  
Appendix A Workpapers  
Page 48 of 75

## Hourly Capacity Pattern 17 (continued)

ID	Project A				Project B				Project C				Project D			
	Yr	Prd	Start	Cap	Yr	Prd	Start	Cap	Yr	Prd	Start	Cap	Yr	Prd	Start	Cap
1	2008	1	1	1.0	2008	2	2	1.0	2008	3	3	1.0	2008	4	4	1.0
2	2008	2	2	1.0	2008	3	3	1.0	2008	4	4	1.0	2008	5	5	1.0
3	2008	3	3	1.0	2008	4	4	1.0	2008	5	5	1.0	2008	6	6	1.0
4	2008	4	4	1.0	2008	5	5	1.0	2008	6	6	1.0	2008	7	7	1.0
5	2008	5	5	1.0	2008	6	6	1.0	2008	7	7	1.0	2008	8	8	1.0
6	2008	6	6	1.0	2008	7	7	1.0	2008	8	8	1.0	2008	9	9	1.0
7	2008	7	7	1.0	2008	8	8	1.0	2008	9	9	1.0	2008	10	10	1.0
8	2008	8	8	1.0	2008	9	9	1.0	2008	10	10	1.0	2008	11	11	1.0
9	2008	9	9	1.0	2008	10	10	1.0	2008	11	11	1.0	2008	12	12	1.0
10	2008	10	10	1.0	2008	11	11	1.0	2008	12	12	1.0	2008	13	13	1.0
11	2008	11	11	1.0	2008	12	12	1.0	2008	13	13	1.0	2008	14	14	1.0
12	2008	12	12	1.0	2008	13	13	1.0	2008	14	14	1.0	2008	15	15	1.0
13	2008	13	13	1.0	2008	14	14	1.0	2008	15	15	1.0	2008	16	16	1.0
14	2008	14	14	1.0	2008	15	15	1.0	2008	16	16	1.0	2008	17	17	1.0
15	2008	15	15	1.0	2008	16	16	1.0	2008	17	17	1.0	2008	18	18	1.0
16	2008	16	16	1.0	2008	17	17	1.0	2008	18	18	1.0	2008	19	19	1.0
17	2008	17	17	1.0	2008	18	18	1.0	2008	19	19	1.0	2008	20	20	1.0
18	2008	18	18	1.0	2008	19	19	1.0	2008	20	20	1.0	2008	21	21	1.0
19	2008	19	19	1.0	2008	20	20	1.0	2008	21	21	1.0	2008	22	22	1.0
20	2008	20	20	1.0	2008	21	21	1.0	2008	22	22	1.0	2008	23	23	1.0
21	2008	21	21	1.0	2008	22	22	1.0	2008	23	23	1.0	2008	24	24	1.0
22	2008	22	22	1.0	2008	23	23	1.0	2008	24	24	1.0	2008	25	25	1.0
23	2008	23	23	1.0	2008	24	24	1.0	2008	25	25	1.0	2008	26	26	1.0
24	2008	24	24	1.0	2008	25	25	1.0	2008	26	26	1.0	2008	27	27	1.0
25	2008	25	25	1.0	2008	26	26	1.0	2008	27	27	1.0	2008	28	28	1.0
26	2008	26	26	1.0	2008	27	27	1.0	2008	28	28	1.0	2008	29	29	1.0
27	2008	27	27	1.0	2008	28	28	1.0	2008	29	29	1.0	2008	30	30	1.0
28	2008	28	28	1.0	2008	29	29	1.0	2008	30	30	1.0	2008	31	31	1.0
29	2008	29	29	1.0	2008	30	30	1.0	2008	31	31	1.0	2008	32	32	1.0
30	2008	30	30	1.0	2008	31	31	1.0	2008	32	32	1.0	2008	33	33	1.0
31	2008	31	31	1.0	2008	32	32	1.0	2008	33	33	1.0	2008	34	34	1.0
32	2008	32	32	1.0	2008	33	33	1.0	2008	34	34	1.0	2008	35	35	1.0
33	2008	33	33	1.0	2008	34	34	1.0	2008	35	35	1.0	2008	36	36	1.0
34	2008	34	34	1.0	2008	35	35	1.0	2008	36	36	1.0	2008	37	37	1.0
35	2008	35	35	1.0	2008	36	36	1.0	2008	37	37	1.0	2008	38	38	1.0
36	2008	36	36	1.0	2008	37	37	1.0	2008	38	38	1.0	2008	39	39	1.0
37	2008	37	37	1.0	2008	38	38	1.0	2008	39	39	1.0	2008	40	40	1.0
38	2008	38	38	1.0	2008	39	39	1.0	2008	40	40	1.0	2008	41	41	1.0
39	2008	39	39	1.0	2008	40	40	1.0	2008	41	41	1.0	2008	42	42	1.0
40	2008	40	40	1.0	2008	41	41	1.0	2008	42	42	1.0	2008	43	43	1.0
41	2008	41	41	1.0	2008	42	42	1.0	2008	43	43	1.0	2008	44	44	1.0
42	2008	42	42	1.0	2008	43	43	1.0	2008	44	44	1.0	2008	45	45	1.0
43	2008	43	43	1.0	2008	44	44	1.0	2008	45	45	1.0	2008	46	46	1.0
44	2008	44	44	1.0	2008	45	45	1.0	2008	46	46	1.0	2008	47	47	1.0
45	2008	45	45	1.0	2008	46	46	1.0	2008	47	47	1.0	2008	48	48	1.0
46	2008	46	46	1.0	2008	47	47	1.0	2008	48	48	1.0	2008	49	49	1.0
47	2008	47	47	1.0	2008	48	48	1.0	2008	49	49	1.0	2008	50	50	1.0
48	2008	48	48	1.0	2008	49	49	1.0	2008	50	50	1.0	2008	51	51	1.0
49	2008	49	49	1.0	2008	50	50	1.0	2008	51	51	1.0	2008	52	52	1.0
50	2008	50	50	1.0	2008	51	51	1.0	2008	52	52	1.0	2008	53	53	1.0
51	2008	51	51	1.0	2008	52	52	1.0	2008	53	53	1.0	2008	54	54	1.0
52	2008	52	52	1.0	2008	53	53	1.0	2008	54	54	1.0	2008	55	55	1.0
53	2008	53	53	1.0	2008	54	54	1.0	2008	55	55	1.0	2008	56	56	1.0
54	2008	54	54	1.0	2008	55	55	1.0	2008	56	56	1.0	2008	57	57	1.0
55	2008	55	55	1.0	2008	56	56	1.0	2008	57	57	1.0	2008	58	58	1.0
56	2008	56	56	1.0	2008	57	57	1.0	2008	58	58	1.0	2008	59	59	1.0
57	2008	57	57	1.0	2008	58	58	1.0	2008	59	59	1.0	2008	60	60	1.0
58	2008	58	58	1.0	2008	59	59	1.0	2008	60	60	1.0	2008	61	61	1.0
59	2008	59	59	1.0	2008	60	60	1.0	2008	61	61	1.0	2008	62	62	1.0
60	2008	60	60	1.0	2008	61	61	1.0	2008	62	62	1.0	2008	63	63	1.0
61	2008	61	61	1.0	2008	62	62	1.0	2008	63	63	1.0	2008	64	64	1.0
62	2008	62	62	1.0	2008	63	63	1.0	2008	64	64	1.0	2008	65	65	1.0
63	2008	63	63	1.0	2008	64	64	1.0	2008	65	65	1.0	2008	66	66	1.0
64	2008	64	64	1.0	2008	65	65	1.0	2008	66	66	1.0	2008	67	67	1.0
65	2008	65	65	1.0	2008	66	66	1.0	2008	67	67	1.0	2008	68	68	1.0
66	2008	66	66	1.0	2008	67	67	1.0	2008	68	68	1.0	2008	69	69	1.0
67	2008	67	67	1.0	2008	68	68	1.0	2008	69	69	1.0	2008	70	70	1.0
68	2008	68	68	1.0	2008	69	69	1.0	2008	70	70	1.0	2008	71	71	1.0
69	2008	69	69	1.0	2008	70	70	1.0	2008	71	71	1.0	2008	72	72	1.0
70	2008	70	70	1.0	2008	71	71	1.0	2008	72	72	1.0	2008	73	73	1.0
71	2008	71	71	1.0	2008	72	72	1.0	2008	73	73	1.0	2008	74	74	1.0
72	2008	72	72	1.0	2008	73	73	1.0	2008	74	74	1.0	2008	75	75	1.0
73	2008	73	73	1.0	2008	74	74	1.0	2008	75	75	1.0	2008	76	76	1.0
74	2008	74	74	1.0	2008	75	75	1.0	2008	76	76	1.0	2008	77	77	1.0
75	2008	75	75	1.0	2008	76	76	1.0	2008	77	77	1.0	2008	78	78	1.0
76	2008	76	76	1.0	2008	77	77	1.0	2008	78	78	1.0	2008	79	79	1.0
77	2008	77	77	1.0	2008	78	78	1.0	2008	79	79	1.0	2008	80	80	1.0
78	2008	78	78	1.0	2008	79	79	1.0	2008	80	80	1.0	2008	81	81	1.0
79	2008	79	79	1.0	2008	80	80	1.0	2008	81	81	1.0	2008	82	82	1.0
80	2008	80	80	1.0	2008	81	81	1.0	2008	82	82	1.0	2008	83	83	1.0
81	2008	81	81	1.0	2008	82	82	1.0	2008	83	83	1.0	2008	84	84	1.0
82	2008	82	82	1.0	2008	83	83	1.0	2008	84	84	1.0	2008	85	85	1.0
83	2008	83	83	1.0	2008	84	84	1.0	2008	85	85	1.0	2008	86	86	1.0
84	2008	84	84	1.0	2008	85	85	1.0	2008	86	86	1.0	2008	87	87	1.0
85	2008	85	85	1.0	2008	86	86	1.0	2008	87	87	1.0	2008	88	88	1.0
86	2008	86	86	1.0	2008	87	87	1.0	2008	88	88	1.0	2008	89	89	1.0
87	2008	87	87	1.0	2008	88	88	1.0	2008	89	89	1.0	2008	90	90	1.0
88	2008	88	88	1.0	2008	89	89	1.0	2008	90	90	1.0	2008	91	91	1.0
89	2008	89	89	1.0	2008	90	90	1.0	2008	91	91	1.0	2008	92	92	1.0
90	2008	90	90	1.0	2008	91	91	1.0	2008	92	92	1.0	2008	93	93	1.0
91	2008	91	91	1.0	2008	92	92	1.0	2008	93	93	1.0	2008	94	94	1.0
9																

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File PTN17 HCP



MECO Calibration Factor Report  
Year 2008  
Appendix A Workpapers  
Page 49 of 75

**Hourly Capacity Pattern 17 (continued)**

[illegible]



**Hourly Capacity Pattern 17 (continued)**

[illegible]

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**Hourly Capacity Pattern 17 (continued)**

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**Hourly Capacity Pattern 17 (continued)**

[illegible]

File PTN17 HCP

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# Hourly Capacity Pattern 17

Yr	Prd	Start Day	Start Hr	Cap Multiplier	OM Multiplier	Yr	Prd	Start Day	Start Hr	Cap Multiplier	OM Multiplier	Yr	Prd	Start Day	Start Hr	Cap Multiplier	OM Multiplier
2008	8	11	5	0.4	1.0	2008	8	21	21	0.4	1.0	2008	9	5	4	0.4	1.0
2008	8	11	6	1.0	1.0	2008	8	22	22	0.4	1.0	2008	9	6	5	1.0	1.0
2008	8	11	7	0.9	1.0	2008	8	23	23	0.4	1.0	2008	9	7	6	0.9	1.0
2008	8	11	8	0.8	1.0	2008	8	24	24	0.4	1.0	2008	9	8	7	0.8	1.0
2008	8	11	9	0.8	1.0	2008	8	25	25	0.4	1.0	2008	9	9	8	0.8	1.0
2008	8	11	10	0.8	1.0	2008	8	26	26	0.4	1.0	2008	9	10	9	0.8	1.0
2008	8	11	11	0.9	1.0	2008	8	27	27	0.4	1.0	2008	9	11	10	0.9	1.0
2008	8	11	12	1.0	1.0	2008	8	28	28	0.4	1.0	2008	9	12	11	1.0	1.0
2008	8	12	1	1.0	1.0	2008	8	29	29	0.4	1.0	2008	9	13	12	1.0	1.0
2008	8	12	2	0.9	1.0	2008	8	30	30	0.4	1.0	2008	9	14	13	0.9	1.0
2008	8	12	3	0.8	1.0	2008	8	31	31	0.4	1.0	2008	9	15	14	0.8	1.0
2008	8	12	4	0.8	1.0	2008	8	32	32	0.4	1.0	2008	9	16	15	0.8	1.0
2008	8	12	5	0.9	1.0	2008	8	33	33	0.4	1.0	2008	9	17	16	0.9	1.0
2008	8	12	6	1.0	1.0	2008	8	34	34	0.4	1.0	2008	9	18	17	1.0	1.0
2008	8	12	7	0.9	1.0	2008	8	35	35	0.4	1.0	2008	9	19	18	0.9	1.0
2008	8	12	8	0.8	1.0	2008	8	36	36	0.4	1.0	2008	9	20	19	0.8	1.0
2008	8	12	9	0.8	1.0	2008	8	37	37	0.4	1.0	2008	9	21	20	0.8	1.0
2008	8	12	10	0.9	1.0	2008	8	38	38	0.4	1.0	2008	9	22	21	0.9	1.0
2008	8	12	11	1.0	1.0	2008	8	39	39	0.4	1.0	2008	9	23	22	1.0	1.0
2008	8	12	12	0.9	1.0	2008	8	40	40	0.4	1.0	2008	9	24	23	0.9	1.0
2008	8	13	1	0.8	1.0	2008	8	41	41	0.4	1.0	2008	9	25	24	0.8	1.0
2008	8	13	2	0.8	1.0	2008	8	42	42	0.4	1.0	2008	9	26	25	0.8	1.0
2008	8	13	3	0.9	1.0	2008	8	43	43	0.4	1.0	2008	9	27	26	0.9	1.0
2008	8	13	4	1.0	1.0	2008	8	44	44	0.4	1.0	2008	9	28	27	1.0	1.0
2008	8	13	5	0.9	1.0	2008	8	45	45	0.4	1.0	2008	9	29	28	0.9	1.0
2008	8	13	6	0.8	1.0	2008	8	46	46	0.4	1.0	2008	9	30	29	0.8	1.0
2008	8	13	7	0.8	1.0	2008	8	47	47	0.4	1.0	2008	9	31	30	0.8	1.0
2008	8	13	8	0.9	1.0	2008	8	48	48	0.4	1.0	2008	9	32	31	0.9	1.0
2008	8	13	9	1.0	1.0	2008	8	49	49	0.4	1.0	2008	9	33	32	1.0	1.0
2008	8	13	10	0.9	1.0	2008	8	50	50	0.4	1.0	2008	9	34	33	0.9	1.0
2008	8	13	11	0.8	1.0	2008	8	51	51	0.4	1.0	2008	9	35	34	0.8	1.0
2008	8	13	12	0.8	1.0	2008	8	52	52	0.4	1.0	2008	9	36	35	0.8	1.0
2008	8	14	1	0.9	1.0	2008	8	53	53	0.4	1.0	2008	9	37	36	0.9	1.0
2008	8	14	2	1.0	1.0	2008	8	54	54	0.4	1.0	2008	9	38	37	1.0	1.0
2008	8	14	3	0.9	1.0	2008	8	55	55	0.4	1.0	2008	9	39	38	0.9	1.0
2008	8	14	4	0.8	1.0	2008	8	56	56	0.4	1.0	2008	9	40	39	0.8	1.0
2008	8	14	5	0.8	1.0	2008	8	57	57	0.4	1.0	2008	9	41	40	0.8	1.0
2008	8	14	6	0.9	1.0	2008	8	58	58	0.4	1.0	2008	9	42	41	0.9	1.0
2008	8	14	7	1.0	1.0	2008	8	59	59	0.4	1.0	2008	9	43	42	1.0	1.0
2008	8	14	8	0.9	1.0	2008	8	60	60	0.4	1.0	2008	9	44	43	0.9	1.0
2008	8	14	9	0.8	1.0	2008	8	61	61	0.4	1.0	2008	9	45	44	0.8	1.0
2008	8	14	10	0.8	1.0	2008	8	62	62	0.4	1.0	2008	9	46	45	0.8	1.0
2008	8	14	11	0.9	1.0	2008	8	63	63	0.4	1.0	2008	9	47	46	0.9	1.0
2008	8	14	12	1.0	1.0	2008	8	64	64	0.4	1.0	2008	9	48	47	1.0	1.0
2008	8	15	1	0.9	1.0	2008	8	65	65	0.4	1.0	2008	9	49	48	0.9	1.0
2008	8	15	2	0.8	1.0	2008	8	66	66	0.4	1.0	2008	9	50	49	0.8	1.0
2008	8	15	3	0.8	1.0	2008	8	67	67	0.4	1.0	2008	9	51	50	0.8	1.0
2008	8	15	4	0.9	1.0	2008	8	68	68	0.4	1.0	2008	9	52	51	0.9	1.0
2008	8	15	5	1.0	1.0	2008	8	69	69	0.4	1.0	2008	9	53	52	1.0	1.0
2008	8	15	6	0.9	1.0	2008	8	70	70	0.4	1.0	2008	9	54	53	0.9	1.0
2008	8	15	7	0.8	1.0	2008	8	71	71	0.4	1.0	2008	9	55	54	0.8	1.0
2008	8	15	8	0.8	1.0	2008	8	72	72	0.4	1.0	2008	9	56	55	0.8	1.0
2008	8	15	9	0.9	1.0	2008	8	73	73	0.4	1.0	2008	9	57	56	0.9	1.0
2008	8	15	10	1.0	1.0	2008	8	74	74	0.4	1.0	2008	9	58	57	1.0	1.0
2008	8	15	11	0.9	1.0	2008	8	75	75	0.4	1.0	2008	9	59	58	0.9	1.0
2008	8	15	12	0.8	1.0	2008	8	76	76	0.4	1.0	2008	9	60	59	0.8	1.0
2008	8	16	1	0.8	1.0	2008	8	77	77	0.4	1.0	2008	9	61	60	0.8	1.0
2008	8	16	2	0.9	1.0	2008	8	78	78	0.4	1.0	2008	9	62	61	0.9	1.0
2008	8	16	3	1.0	1.0	2008	8	79	79	0.4	1.0	2008	9	63	62	1.0	1.0
2008	8	16	4	0.9	1.0	2008	8	80	80	0.4	1.0	2008	9	64	63	0.9	1.0
2008	8	16	5	0.8	1.0	2008	8	81	81	0.4	1.0	2008	9	65	64	0.8	1.0
2008	8	16	6	0.8	1.0	2008	8	82	82	0.4	1.0	2008	9	66	65	0.8	1.0
2008	8	16	7	0.9	1.0	2008	8	83	83	0.4	1.0	2008	9	67	66	0.9	1.0
2008	8	16	8	1.0	1.0	2008	8	84	84	0.4	1.0	2008	9	68	67	1.0	1.0
2008	8	16	9	0.9	1.0	2008	8	85	85	0.4	1.0	2008	9	69	68	0.9	1.0
2008	8	16	10	0.8	1.0	2008	8	86	86	0.4	1.0	2008	9	70	69	0.8	1.0
2008	8	16	11	0.8	1.0	2008	8	87	87	0.4	1.0	2008	9	71	70	0.8	1.0
2008	8	16	12	0.9	1.0	2008	8	88	88	0.4	1.0	2008	9	72	71	0.9	1.0
2008	8	17	1	1.0	1.0	2008	8	89	89	0.4	1.0	2008	9	73	72	1.0	1.0
2008	8	17	2	0.9	1.0	2008	8	90	90	0.4	1.0	2008	9	74	73	0.9	1.0
2008	8	17	3	0.8	1.0	2008	8	91	91	0.4	1.0	2008	9	75	74	0.8	1.0
2008	8	17	4	0.8	1.0	2008	8	92	92	0.4	1.0	2008	9	76	75	0.8	1.0
2008	8	17	5	0.9	1.0	2008	8	93	93	0.4	1.0	2008	9	77	76	0.9	1.0
2008	8	17	6	1.0	1.0	2008	8	94	94	0.4	1.0	2008	9	78	77	1.0	1.0
2008	8	17	7	0.9	1.0	2008	8	95	95	0.4	1.0	2008	9	79	78	0.9	1.0
2008	8	17	8	0.8	1.0	2008	8	96	96	0.4	1.0	2008	9	80	79	0.8	1.0
2008	8	17	9	0.8	1.0	2008	8	97	97	0.4	1.0	2008	9	81	80	0.8	1.0
2008	8	17	10	0.9	1.0	2008	8	98	98	0.4	1.0	2008	9	82	81	0.9	1.0
2008	8	17	11	1.0	1.0	2008	8	99	99	0.4	1.0	2008	9	83	82	1.0	1.0
2008	8	17	12	0.9	1.0	2008	8	100	100	0.4	1.0	2008	9	84	83	0.9	1.0
2008	8	18	1	0.8	1.0	2008	8	101	101	0.4	1.0	2008	9	85	84	0.8	1.0
2008	8	18	2	0.8	1.0	2008	8	102	102	0.4	1.0	2008	9	86	85	0.8	1.0
2008	8	18	3	0.9	1.0	2008	8	103	103	0.4	1.0	2008	9	87	86	0.9	1.0
2008	8	18	4	1.0	1.0	2008	8	104	104	0.4	1.0	2008	9	88	87	1.0	1.0
2008	8	18	5	0.9	1.0	2008	8	105	105	0.4	1.0	2008	9	89	88	0.9	1.0
2008	8	18	6	0.8	1.0	2008	8	106	106	0.4	1.0	2008	9	90	89	0.8	1.0
2008	8	18	7	0.8	1.0	2008	8	107	107	0.4	1.0	2008	9	91			



**Hourly Capacity Pattern 17 (continued)**

ID	Task A				Task B				Task C				Task D			
	Yr	Prd	Start	Cap	Yr	Prd	Start	Cap	Yr	Prd	Start	Cap	Yr	Prd	Start	Cap
1	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
2	2008	9	11	0.5	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
3	2008	9	12	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
4	2008	9	13	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
5	2008	9	14	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
6	2008	9	15	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
7	2008	9	16	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
8	2008	9	17	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
9	2008	9	18	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
10	2008	9	19	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
11	2008	9	20	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
12	2008	9	21	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
13	2008	9	22	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
14	2008	9	23	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
15	2008	9	24	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
16	2008	9	25	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
17	2008	9	26	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
18	2008	9	27	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
19	2008	9	28	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
20	2008	9	29	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
21	2008	9	30	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
22	2008	9	31	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
23	2008	9	32	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
24	2008	9	33	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
25	2008	9	34	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
26	2008	9	35	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
27	2008	9	36	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
28	2008	9	37	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
29	2008	9	38	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
30	2008	9	39	1.0	2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0
31	2				2008	9	10	1.0	2008	9	10	1.0	2008	9	10	1.0



## Hourly Capacity Pattern 17 (continued)

Yr	Prd	Day	Hr	Cap		ON		Yr	Prd	Day	Hr	Cap		ON		Yr	Prd	Day	Hr	Cap		ON	
				Multiplier	Value	Multiplier	Value					Multiplier	Value	Multiplier	Value					Multiplier	Value	Multiplier	Value
2008	10	24	21	0.9	1.0	2008	11	6	1	0.8	1.0	2008	11	18	6	1.0	1.0	2008	11	21	21	0.9	1.0
2008	10	24	22	0.8	1.0	2008	11	6	2	0.9	1.0	2008	11	18	7	1.0	1.0	2008	11	21	22	0.8	1.0
2008	10	25	1	0.8	1.0	2008	11	6	3	1.0	1.0	2008	11	18	8	1.0	1.0	2008	11	21	23	0.9	1.0
2008	10	25	2	0.9	1.0	2008	11	6	4	1.0	1.0	2008	11	18	9	1.0	1.0	2008	11	21	24	0.8	1.0
2008	10	25	3	1.0	1.0	2008	11	6	5	1.0	1.0	2008	11	18	10	1.0	1.0	2008	11	21	25	0.9	1.0
2008	10	25	4	1.0	1.0	2008	11	6	6	1.0	1.0	2008	11	18	11	1.0	1.0	2008	11	21	26	1.0	1.0
2008	10	25	5	1.0	1.0	2008	11	6	7	1.0	1.0	2008	11	18	12	1.0	1.0	2008	11	21	27	1.0	1.0
2008	10	25	6	1.0	1.0	2008	11	6	8	1.0	1.0	2008	11	18	13	1.0	1.0	2008	11	21	28	1.0	1.0
2008	10	25	7	1.0	1.0	2008	11	6	9	1.0	1.0	2008	11	18	14	1.0	1.0	2008	11	21	29	1.0	1.0
2008	10	25	8	1.0	1.0	2008	11	6	10	1.0	1.0	2008	11	18	15	1.0	1.0	2008	11	21	30	1.0	1.0
2008	10	25	9	1.0	1.0	2008	11	6	11	1.0	1.0	2008	11	18	16	1.0	1.0	2008	11	21	31	1.0	1.0
2008	10	25	10	1.0	1.0	2008	11	6	12	1.0	1.0	2008	11	18	17	1.0	1.0	2008	11	21	32	1.0	1.0
2008	10	25	11	1.0	1.0	2008	11	6	13	1.0	1.0	2008	11	18	18	1.0	1.0	2008	11	21	33	1.0	1.0
2008	10	25	12	1.0	1.0	2008	11	6	14	1.0	1.0	2008	11	18	19	1.0	1.0	2008	11	21	34	1.0	1.0
2008	10	25	13	1.0	1.0	2008	11	6	15	1.0	1.0	2008	11	18	20	1.0	1.0	2008	11	21	35	1.0	1.0
2008	10	25	14	1.0	1.0	2008	11	6	16	1.0	1.0	2008	11	18	21	1.0	1.0	2008	11	21	36	1.0	1.0
2008	10	25	15	1.0	1.0	2008	11	6	17	1.0	1.0	2008	11	18	22	1.0	1.0	2008	11	21	37	1.0	1.0
2008	10	25	16	1.0	1.0	2008	11	6	18	1.0	1.0	2008	11	18	23	1.0	1.0	2008	11	21	38	1.0	1.0
2008	10	25	17	1.0	1.0	2008	11	6	19	1.0	1.0	2008	11	18	24	1.0	1.0	2008	11	21	39	1.0	1.0
2008	10	25	18	1.0	1.0	2008	11	6	20	1.0	1.0	2008	11	18	25	1.0	1.0	2008	11	21	40	1.0	1.0
2008	10	25	19	1.0	1.0	2008	11	6	21	1.0	1.0	2008	11	18	26	1.0	1.0	2008	11	21	41	1.0	1.0
2008	10	25	20	1.0	1.0	2008	11	6	22	1.0	1.0	2008	11	18	27	1.0	1.0	2008	11	21	42	1.0	1.0
2008	10	25	21	1.0	1.0	2008	11	6	23	1.0	1.0	2008	11	18	28	1.0	1.0	2008	11	21	43	1.0	1.0
2008	10	25	22	1.0	1.0	2008	11	6	24	1.0	1.0	2008	11	18	29	1.0	1.0	2008	11	21	44	1.0	1.0
2008	10	25	23	1.0	1.0	2008	11	6	25	1.0	1.0	2008	11	18	30	1.0	1.0	2008	11	21	45	1.0	1.0
2008	10	25	24	1.0	1.0	2008	11	6	26	1.0	1.0	2008	11	18	31	1.0	1.0	2008	11	21	46	1.0	1.0
2008	10	25	25	1.0	1.0	2008	11	6	27	1.0	1.0	2008	11	18	32	1.0	1.0	2008	11	21	47	1.0	1.0
2008	10	25	26	1.0	1.0	2008	11	6	28	1.0	1.0	2008	11	18	33	1.0	1.0	2008	11	21	48	1.0	1.0
2008	10	25	27	1.0	1.0	2008	11	6	29	1.0	1.0	2008	11	18	34	1.0	1.0	2008	11	21	49	1.0	1.0
2008	10	25	28	1.0	1.0	2008	11	6	30	1.0	1.0	2008	11	18	35	1.0	1.0	2008	11	21	50	1.0	1.0
2008	10	25	29	1.0	1.0	2008	11	6	31	1.0	1.0	2008	11	18	36	1.0	1.0	2008	11	21	51	1.0	1.0
2008	10	25	30	1.0	1.0	2008	11	6	32	1.0	1.0	2008	11	18	37	1.0	1.0	2008	11	21	52	1.0	1.0
2008	10	25	31	1.0	1.0	2008	11	6	33	1.0	1.0	2008	11	18	38	1.0	1.0	2008	11	21	53	1.0	1.0
2008	10	25	32	1.0	1.0	2008	11	6	34	1.0	1.0	2008	11	18	39	1.0	1.0	2008	11	21	54	1.0	1.0
2008	10	25	33	1.0	1.0	2008	11	6	35	1.0	1.0	2008	11	18	40	1.0	1.0	2008	11	21	55	1.0	1.0
2008	10	25	34	1.0	1.0	2008	11	6	36	1.0	1.0	2008	11	18	41	1.0	1.0	2008	11	21	56	1.0	1.0
2008	10	25	35	1.0	1.0	2008	11	6	37	1.0	1.0	2008	11	18	42	1.0	1.0	2008	11	21	57	1.0	1.0
2008	10	25	36	1.0	1.0	2008	11	6	38	1.0	1.0	2008	11	18	43	1.0	1.0	2008	11	21	58	1.0	1.0
2008	10	25	37	1.0	1.0	2008	11	6	39	1.0	1.0	2008	11	18	44	1.0	1.0	2008	11	21	59	1.0	1.0
2008	10	25	38	1.0	1.0	2008	11	6	40	1.0	1.0	2008	11	18	45	1.0	1.0	2008	11	21	60	1.0	1.0
2008	10	25	39	1.0	1.0	2008	11	6	41	1.0	1.0	2008	11	18	46	1.0	1.0	2008	11	21	61	1.0	1.0
2008	10	25	40	1.0	1.0	2008	11	6	42	1.0	1.0	2008	11	18	47	1.0	1.0	2008	11	21	62	1.0	1.0
2008	10	25	41	1.0	1.0	2008	11	6	43	1.0	1.0	2008	11	18	48	1.0	1.0	2008	11	21	63	1.0	1.0
2008	10	25	42	1.0	1.0	2008	11	6	44	1.0	1.0	2008	11	18	49	1.0	1.0	2008	11	21	64	1.0	1.0
2008	10	25	43	1.0	1.0	2008	11	6	45	1.0	1.0	2008	11	18	50	1.0	1.0	2008	11	21	65	1.0	1.0
2008	10	25	44	1.0	1.0	2008	11	6	46	1.0	1.0	2008	11	18	51	1.0	1.0	2008	11	21	66	1.0	1.0
2008	10	25	45	1.0	1.0	2008	11	6	47	1.0	1.0	2008	11	18	52	1.0	1.0	2008	11	21	67	1.0	1.0
2008	10	25	46	1.0	1.0	2008	11	6	48	1.0	1.0	2008	11	18	53	1.0	1.0	2008	11	21	68	1.0	1.0
2008	10	25	47	1.0	1.0	2008	11	6	49	1.0	1.0	2008	11	18	54	1.0	1.0	2008	11	21	69	1.0	1.0
2008	10	25	48	1.0	1.0	2008	11	6	50	1.0	1.0	2008	11	18	55	1.0	1.0	2008	11	21	70	1.0	1.0
2008	10	25	49	1.0	1.0	2008	11	6	51	1.0	1.0	2008	11	18	56	1.0	1.0	2008	11	21	71	1.0	1.0
2008	10	25	50	1.0	1.0	2008	11	6	52	1.0	1.0	2008	11	18	57	1.0	1.0	2008	11	21	72	1.0	1.0
2008	10	25	51	1.0	1.0	2008	11	6	53	1.0	1.0	2008	11	18	58	1.0	1.0	2008	11	21	73	1.0	1.0
2008	10	25	52	1.0	1.0	2008	11	6	54	1.0	1.0	2008	11	18	59	1.0	1.0	2008	11	21	74	1.0	1.0
2008	10	25	53	1.0	1.0	2008	11	6	55	1.0	1.0	2008	11	18	60	1.0	1.0	2008	11	21	75	1.0	1.0
2008	10	25	54	1.0	1.0	2008	11	6	56	1.0	1.0	2008	11	18	61	1.0	1.0	2008	11	21	76	1.0	1.0
2008	10	25	55	1.0	1.0	2008	11	6	57	1.0	1.0	2008	11	18	62	1.0	1.0	2008	11	21	77	1.0	1.0
2008	10	25	56	1.0	1.0	2008	11	6	58	1.0	1.0	2008	11	18	63	1.0	1.0	2008	11	21	78	1.0	1.0
2008	10	25	57	1.0	1.0	2008	11	6	59	1.0	1.0	2008	11	18	64	1.0	1.0	2008	11	21	79	1.0	1.0
2008	10	25	58	1.0	1.0	2008	11	6	60	1.0	1.0	2008	11	18	65	1.0	1.0	2008	11	21	80	1.0	1.0
2008	10	25	59	1.0	1.0	2008	11	6	61	1.0	1.0	2008	11	18	66	1.0	1.0	2008	11	21	81	1.0	1.0
2008	10	25	60	1.0	1.0	2008	11	6	62	1.0	1.0	2008	11	18	67	1.0	1.0	2008	11	21	82	1.0	1.0
2008	10	25	61	1.0	1.0	2008	11	6	63	1.0	1.0	2008	11	18	68	1.0	1.0	2008	11	21	83	1.0	1.0
2008	10	25	62	1.0	1.0	2008	11	6	64	1.0	1.0	2008	11	18	69	1.0	1.0	2008	11	21	84	1.0	1.0
2008	10	25	63	1.0	1.0	2008	11	6	65	1.0	1.0	2008	11	18	70	1.0	1.0	2008	11	21	85	1.0	1.0

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File PTN17 HCP



Hourly Capacity Pattern 17 (continued)

Yr	Prd	Start Day	Start Day	Cap Multiplier	OM Multiplier	Yr	Prd	Start Day	Start Day	Cap Multiplier	OM Multiplier	Yr	Prd	Start Day	Start Day	Cap Multiplier	OM Multiplier
2008	12	1	1	0.9	1.0	2008	12	13	13	5	1.0	2008	12	25	25	0.9	1.0
2008	12	2	2	0.9	1.0	2008	12	14	14	6	1.0	2008	12	26	26	0.9	1.0
2008	12	3	3	0.9	1.0	2008	12	15	15	7	1.0	2008	12	27	27	0.9	1.0
2008	12	4	4	0.9	1.0	2008	12	16	16	8	1.0	2008	12	28	28	0.9	1.0
2008	12	5	5	0.9	1.0	2008	12	17	17	9	1.0	2008	12	29	29	0.9	1.0
2008	12	6	6	0.9	1.0	2008	12	18	18	10	1.0	2008	12	30	30	0.9	1.0
2008	12	7	7	0.9	1.0	2008	12	19	19	11	1.0	2008	12	31	31	0.9	1.0
2008	12	8	8	0.9	1.0	2008	12	20	20	12	1.0	2008	12	32	32	0.9	1.0
2008	12	9	9	0.9	1.0	2008	12	21	21	13	1.0	2008	12	33	33	0.9	1.0
2008	12	10	10	0.9	1.0	2008	12	22	22	14	1.0	2008	12	34	34	0.9	1.0
2008	12	11	11	0.9	1.0	2008	12	23	23	15	1.0	2008	12	35	35	0.9	1.0
2008	12	12	12	0.9	1.0	2008	12	24	24	16	1.0	2008	12	36	36	0.9	1.0
2008	12	13	13	0.9	1.0	2008	12	25	25	17	1.0	2008	12	37	37	0.9	1.0
2008	12	14	14	0.9	1.0	2008	12	26	26	18	1.0	2008	12	38	38	0.9	1.0
2008	12	15	15	0.9	1.0	2008	12	27	27	19	1.0	2008	12	39	39	0.9	1.0
2008	12	16	16	0.9	1.0	2008	12	28	28	20	1.0	2008	12	40	40	0.9	1.0
2008	12	17	17	0.9	1.0	2008	12	29	29	21	1.0	2008	12	41	41	0.9	1.0
2008	12	18	18	0.9	1.0	2008	12	30	30	22	1.0	2008	12	42	42	0.9	1.0
2008	12	19	19	0.9	1.0	2008	12	31	31	23	1.0	2008	12	43	43	0.9	1.0
2008	12	20	20	0.9	1.0	2008	12	32	32	24	1.0	2008	12	44	44	0.9	1.0
2008	12	21	21	0.9	1.0	2008	12	33	33	25	1.0	2008	12	45	45	0.9	1.0
2008	12	22	22	0.9	1.0	2008	12	34	34	26	1.0	2008	12	46	46	0.9	1.0
2008	12	23	23	0.9	1.0	2008	12	35	35	27	1.0	2008	12	47	47	0.9	1.0
2008	12	24	24	0.9	1.0	2008	12	36	36	28	1.0	2008	12	48	48	0.9	1.0
2008	12	25	25	0.9	1.0	2008	12	37	37	29	1.0	2008	12	49	49	0.9	1.0
2008	12	26	26	0.9	1.0	2008	12	38	38	30	1.0	2008	12	50	50	0.9	1.0
2008	12	27	27	0.9	1.0	2008	12	39	39	31	1.0	2008	12	51	51	0.9	1.0
2008	12	28	28	0.9	1.0	2008	12	40	40	32	1.0	2008	12	52	52	0.9	1.0
2008	12	29	29	0.9	1.0	2008	12	41	41	33	1.0	2008	12	53	53	0.9	1.0
2008	12	30	30	0.9	1.0	2008	12	42	42	34	1.0	2008	12	54	54	0.9	1.0
2008	12	31	31	0.9	1.0	2008	12	43	43	35	1.0	2008	12	55	55	0.9	1.0
2008	12	32	32	0.9	1.0	2008	12	44	44	36	1.0	2008	12	56	56	0.9	1.0
2008	12	33	33	0.9	1.0	2008	12	45	45	37	1.0	2008	12	57	57	0.9	1.0
2008	12	34	34	0.9	1.0	2008	12	46	46	38	1.0	2008	12	58	58	0.9	1.0
2008	12	35	35	0.9	1.0	2008	12	47	47	39	1.0	2008	12	59	59	0.9	1.0
2008	12	36	36	0.9	1.0	2008	12	48	48	40	1.0	2008	12	60	60	0.9	1.0
2008	12	37	37	0.9	1.0	2008	12	49	49	41	1.0	2008	12	61	61	0.9	1.0
2008	12	38	38	0.9	1.0	2008	12	50	50	42	1.0	2008	12	62	62	0.9	1.0
2008	12	39	39	0.9	1.0	2008	12	51	51	43	1.0	2008	12	63	63	0.9	1.0
2008	12	40	40	0.9	1.0	2008	12	52	52	44	1.0	2008	12	64	64	0.9	1.0
2008	12	41	41	0.9	1.0	2008	12	53	53	45	1.0	2008	12	65	65	0.9	1.0
2008	12	42	42	0.9	1.0	2008	12	54	54	46	1.0	2008	12	66	66	0.9	1.0
2008	12	43	43	0.9	1.0	2008	12	55	55	47	1.0	2008	12	67	67	0.9	1.0
2008	12	44	44	0.9	1.0	2008	12	56	56	48	1.0	2008	12	68	68	0.9	1.0
2008	12	45	45	0.9	1.0	2008	12	57	57	49	1.0	2008	12	69	69	0.9	1.0
2008	12	46	46	0.9	1.0	2008	12	58	58	50	1.0	2008	12	70	70	0.9	1.0
2008	12	47	47	0.9	1.0	2008	12	59	59	51	1.0	2008	12	71	71	0.9	1.0
2008	12	48	48	0.9	1.0	2008	12	60	60	52	1.0	2008	12	72	72	0.9	1.0
2008	12	49	49	0.9	1.0	2008	12	61	61	53	1.0	2008	12	73	73	0.9	1.0
2008	12	50	50	0.9	1.0	2008	12	62	62	54	1.0	2008	12	74	74	0.9	1.0
2008	12	51	51	0.9	1.0	2008	12	63	63	55	1.0	2008	12	75	75	0.9	1.0
2008	12	52	52	0.9	1.0	2008	12	64	64	56	1.0	2008	12	76	76	0.9	1.0
2008	12	53	53	0.9	1.0	2008	12	65	65	57	1.0	2008	12	77	77	0.9	1.0
2008	12	54	54	0.9	1.0	2008	12	66	66	58	1.0	2008	12	78	78	0.9	1.0
2008	12	55	55	0.9	1.0	2008	12	67	67	59	1.0	2008	12	79	79	0.9	1.0
2008	12	56	56	0.9	1.0	2008	12	68	68	60	1.0	2008	12	80	80	0.9	1.0
2008	12	57	57	0.9	1.0	2008	12	69	69	61	1.0	2008	12	81	81	0.9	1.0
2008	12	58	58	0.9	1.0	2008	12	70	70	62	1.0	2008	12	82	82	0.9	1.0
2008	12	59	59	0.9	1.0	2008	12	71	71	63	1.0	2008	12	83	83	0.9	1.0
2008	12	60	60	0.9	1.0	2008	12	72	72	64	1.0	2008	12	84	84	0.9	1.0
2008	12	61	61	0.9	1.0	2008	12	73	73	65	1.0	2008	12	85	85	0.9	1.0
2008	12	62	62	0.9	1.0	2008	12	74	74	66	1.0	2008	12	86	86	0.9	1.0
2008	12	63	63	0.9	1.0	2008	12	75	75	67	1.0	2008	12	87	87	0.9	1.0
2008	12	64	64	0.9	1.0	2008	12	76	76	68	1.0	2008	12	88	88	0.9	1.0
2008	12	65	65	0.9	1.0	2008	12	77	77	69	1.0	2008	12	89	89	0.9	1.0
2008	12	66	66	0.9	1.0	2008	12	78	78	70	1.0	2008	12	90	90	0.9	1.0
2008	12	67	67	0.9	1.0	2008	12	79	79	71	1.0	2008	12	91	91	0.9	1.0
2008	12	68	68	0.9	1.0	2008	12	80	80	72	1.0	2008	12	92	92	0.9	1.0
2008	12	69	69	0.9	1.0	2008	12	81	81	73	1.0	2008	12	93	93	0.9	1.0
2008	12	70	70	0.9	1.0	2008	12	82	82	74	1.0	2008	12	94	94	0.9	1.0
2008	12	71	71	0.9	1.0	2008	12	83	83	75	1.0	2008	12	95	95	0.9	1.0
2008	12	72	72	0.9	1.0	2008	12	84	84	76	1.0	2008	12	96	96	0.9	1.0
2008	12	73	73	0.9	1.0	2008	12	85	85	77	1.0	2008	12	97	97	0.9	1.0
2008	12	74	74	0.9	1.0	2008	12	86	86	78	1.0	2008	12	98	98	0.9	1.0
2008	12	75	75	0.9	1.0	2008	12	87	87	79	1.0	2008	12	99	99	0.9	1.0
2008	12	76	76	0.9	1.0	2008	12	88	88	80	1.0	2008	12	100	100	0.9	1.0
2008	12	77	77	0.9	1.0	2008	12	89	89	81	1.0	2008	12	101	101	0.9	1.0
2008	12	78	78	0.9	1.0	2008	12	90	90	82	1.0	2008	12	102	102	0.9	1.0
2008	12	79	79	0.9	1.0	2008	12	91	91	83	1.0	2008	12	103	103	0.9	1.0
2008	12	80	80	0.9	1.0	2008	12	92	92	84	1.0	2008	12	104	104	0.9	1.0
2008	12	81	81	0.9	1.0	2008	12	93	93	85	1.0	2008	12	105	105	0.9	1.0
2008	12	82	82	0.9	1.0	2008	12	94	94	86	1.0	2008	12	106	106	0.9	1.0
2008	12	83	83	0.9	1.0	2008	12	95	95	87	1.0	2008	12	107	107	0.9	1.0
2008	12	84	84	0.9	1.0	2008	12	96	96	88	1.0	2008	12	108	108	0.9	1.0
2008	12	85	85	0.9	1.0	2008	12	97	97	89							



## Hourly Capacity Pattern 18

File PTN18 HCP

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**Hourly Capacity Pattern 18 (continued)**

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Hourly Capacity Pattern 18 (continued)

Yr	Prd	Start Day	Hr	Cap Multiplier	OM Multiplier	Yr	Prd	Start Day	Hr	Cap Multiplier	OM Multiplier	Yr	Prd	Start Day	Hr	Cap Multiplier	OM Multiplier
2008	5	4	1	0.0	1.0	2008	5	24	23	0.0	1.0	2008	6	14	3	0.0	1.0
2008	5	4	5	1.0	1.0	2008	5	25	1	0.0	1.0	2008	6	14	23	0.0	1.0
2008	5	4	23	0.0	1.0	2008	5	26	5	1.0	1.0	2008	6	15	1	0.0	1.0
2008	5	5	1	0.0	1.0	2008	5	27	23	0.0	1.0	2008	6	15	5	0.0	1.0
2008	5	5	23	0.0	1.0	2008	5	28	1	0.0	1.0	2008	6	15	23	0.0	1.0
2008	5	6	1	0.0	1.0	2008	5	29	5	1.0	1.0	2008	6	16	1	0.0	1.0
2008	5	6	23	0.0	1.0	2008	5	30	23	0.0	1.0	2008	6	16	23	0.0	1.0
2008	5	7	1	0.0	1.0	2008	5	31	1	0.0	1.0	2008	6	17	1	0.0	1.0
2008	5	7	23	0.0	1.0	2008	5	32	23	0.0	1.0	2008	6	17	23	0.0	1.0
2008	5	8	1	0.0	1.0	2008	5	33	1	0.0	1.0	2008	6	18	1	0.0	1.0
2008	5	8	23	0.0	1.0	2008	5	34	23	0.0	1.0	2008	6	18	23	0.0	1.0
2008	5	9	1	0.0	1.0	2008	5	35	1	0.0	1.0	2008	6	19	1	0.0	1.0
2008	5	9	23	0.0	1.0	2008	5	36	23	0.0	1.0	2008	6	19	23	0.0	1.0
2008	5	10	1	0.0	1.0	2008	5	37	1	0.0	1.0	2008	6	20	1	0.0	1.0
2008	5	10	23	0.0	1.0	2008	5	38	23	0.0	1.0	2008	6	20	23	0.0	1.0
2008	5	11	1	0.0	1.0	2008	5	39	1	0.0	1.0	2008	6	21	1	0.0	1.0
2008	5	11	23	0.0	1.0	2008	5	40	23	0.0	1.0	2008	6	21	23	0.0	1.0
2008	5	12	1	0.0	1.0	2008	5	41	1	0.0	1.0	2008	6	22	1	0.0	1.0
2008	5	12	23	0.0	1.0	2008	5	42	23	0.0	1.0	2008	6	22	23	0.0	1.0
2008	5	13	1	0.0	1.0	2008	5	43	1	0.0	1.0	2008	6	23	1	0.0	1.0
2008	5	13	23	0.0	1.0	2008	5	44	23	0.0	1.0	2008	6	23	23	0.0	1.0
2008	5	14	1	0.0	1.0	2008	5	45	1	0.0	1.0	2008	6	24	1	0.0	1.0
2008	5	14	23	0.0	1.0	2008	5	46	23	0.0	1.0	2008	6	24	23	0.0	1.0
2008	5	15	1	0.0	1.0	2008	5	47	1	0.0	1.0	2008	6	25	1	0.0	1.0
2008	5	15	23	0.0	1.0	2008	5	48	23	0.0	1.0	2008	6	25	23	0.0	1.0
2008	5	16	1	0.0	1.0	2008	5	49	1	0.0	1.0	2008	6	26	1	0.0	1.0
2008	5	16	23	0.0	1.0	2008	5	50	23	0.0	1.0	2008	6	26	23	0.0	1.0
2008	5	17	1	0.0	1.0	2008	5	51	1	0.0	1.0	2008	6	27	1	0.0	1.0
2008	5	17	23	0.0	1.0	2008	5	52	23	0.0	1.0	2008	6	27	23	0.0	1.0
2008	5	18	1	0.0	1.0	2008	5	53	1	0.0	1.0	2008	6	28	1	0.0	1.0
2008	5	18	23	0.0	1.0	2008	5	54	23	0.0	1.0	2008	6	28	23	0.0	1.0
2008	5	19	1	0.0	1.0	2008	5	55	1	0.0	1.0	2008	6	29	1	0.0	1.0
2008	5	19	23	0.0	1.0	2008	5	56	23	0.0	1.0	2008	6	29	23	0.0	1.0
2008	5	20	1	0.0	1.0	2008	5	57	1	0.0	1.0	2008	6	30	1	0.0	1.0
2008	5	20	23	0.0	1.0	2008	5	58	23	0.0	1.0	2008	6	30	23	0.0	1.0
2008	5	21	1	0.0	1.0	2008	5	59	1	0.0	1.0	2008	6	31	1	0.0	1.0
2008	5	21	23	0.0	1.0	2008	5	60	23	0.0	1.0	2008	6	31	23	0.0	1.0
2008	5	22	1	0.0	1.0	2008	5	61	1	0.0	1.0	2008	6	32	1	0.0	1.0
2008	5	22	23	0.0	1.0	2008	5	62	23	0.0	1.0	2008	6	32	23	0.0	1.0
2008	5	23	1	0.0	1.0	2008	5	63	1	0.0	1.0	2008	6	33	1	0.0	1.0
2008	5	23	23	0.0	1.0	2008	5	64	23	0.0	1.0	2008	6	33	23	0.0	1.0
2008	5	24	1	0.0	1.0	2008	5	65	1	0.0	1.0	2008	6	34	1	0.0	1.0
2008	5	24	23	0.0	1.0	2008	5	66	23	0.0	1.0	2008	6	34	23	0.0	1.0
2008	5	25	1	0.0	1.0	2008	5	67	1	0.0	1.0	2008	6	35	1	0.0	1.0
2008	5	25	23	0.0	1.0	2008	5	68	23	0.0	1.0	2008	6	35	23	0.0	1.0
2008	5	26	1	0.0	1.0	2008	5	69	1	0.0	1.0	2008	6	36	1	0.0	1.0
2008	5	26	23	0.0	1.0	2008	5	70	23	0.0	1.0	2008	6	36	23	0.0	1.0
2008	5	27	1	0.0	1.0	2008	5	71	1	0.0	1.0	2008	6	37	1	0.0	1.0
2008	5	27	23	0.0	1.0	2008	5	72	23	0.0	1.0	2008	6	37	23	0.0	1.0
2008	5	28	1	0.0	1.0	2008	5	73	1	0.0	1.0	2008	6	38	1	0.0	1.0
2008	5	28	23	0.0	1.0	2008	5	74	23	0.0	1.0	2008	6	38	23	0.0	1.0
2008	5	29	1	0.0	1.0	2008	5	75	1	0.0	1.0	2008	6	39	1	0.0	1.0
2008	5	29	23	0.0	1.0	2008	5	76	23	0.0	1.0	2008	6	39	23	0.0	1.0
2008	5	30	1	0.0	1.0	2008	5	77	1	0.0	1.0	2008	6	40	1	0.0	1.0
2008	5	30	23	0.0	1.0	2008	5	78	23	0.0	1.0	2008	6	40	23	0.0	1.0
2008	5	31	1	0.0	1.0	2008	5	79	1	0.0	1.0	2008	6	41	1	0.0	1.0
2008	5	31	23	0.0	1.0	2008	5	80	23	0.0	1.0	2008	6	41	23	0.0	1.0
2008	5	32	1	0.0	1.0	2008	5	81	1	0.0	1.0	2008	6	42	1	0.0	1.0
2008	5	32	23	0.0	1.0	2008	5	82	23	0.0	1.0	2008	6	42	23	0.0	1.0
2008	5	33	1	0.0	1.0	2008	5	83	1	0.0	1.0	2008	6	43	1	0.0	1.0
2008	5	33	23	0.0	1.0	2008	5	84	23	0.0	1.0	2008	6	43	23	0.0	1.0
2008	5	34	1	0.0	1.0	2008	5	85	1	0.0	1.0	2008	6	44	1	0.0	1.0
2008	5	34	23	0.0	1.0	2008	5	86	23	0.0	1.0	2008	6	44	23	0.0	1.0
2008	5	35	1	0.0	1.0	2008	5	87	1	0.0	1.0	2008	6	45	1	0.0	1.0
2008	5	35	23	0.0	1.0	2008	5	88	23	0.0	1.0	2008	6	45	23	0.0	1.0
2008	5	36	1	0.0	1.0	2008	5	89	1	0.0	1.0	2008	6	46	1	0.0	1.0
2008	5	36	23	0.0	1.0	2008	5	90	23	0.0	1.0	2008	6	46	23	0.0	1.0
2008	5	37	1	0.0	1.0	2008	5	91	1	0.0	1.0	2008	6	47	1	0.0	1.0
2008	5	37	23	0.0	1.0	2008	5	92	23	0.0	1.0	2008	6	47	23	0.0	1.0
2008	5	38	1	0.0	1.0	2008	5	93	1	0.0	1.0	2008	6	48	1	0.0	1.0
2008	5	38	23	0.0	1.0	2008	5	94	23	0.0	1.0	2008	6	48	23	0.0	1.0
2008	5	39	1	0.0	1.0	2008	5	95	1	0.0	1.0	2008	6	49	1	0.0	1.0
2008	5	39	23	0.0	1.0	2008	5	96	23	0.0	1.0	2008	6	49	23	0.0	1.0
2008	5	40	1	0.0	1.0	2008	5	97	1	0.0	1.0	2008	6	50	1	0.0	1.0
2008	5	40	23	0.0	1.0	2008	5	98	23	0.0	1.0	2008	6	50	23	0.0	1.0
2008	5	41	1	0.0	1.0	2008	5	99	1	0.0	1.0	2008	6	51	1	0.0	1.0
2008	5	41	23	0.0	1.0	2008	5	100	23	0.0	1.0	2008	6	51	23	0.0	1.0
2008	5	42	1	0.0	1.0	2008	5	101	1	0.0	1.0	2008	6	52	1	0.0	1.0
2008	5	42	23	0.0	1.0	2008	5	102	23	0.0	1.0	2008	6	52	23	0.0	1.0
2008	5	43	1	0.0	1.0	2008	5	103	1	0.0	1.0	2008	6	53	1	0.0	1.0
2008	5	43	23	0.0	1.0	2008	5	104	23	0.0	1.0	2008	6	53	23	0.0	1.0
2008	5	44	1	0.0	1.0	2008	5	105	1	0.0	1.0	2008	6	54	1	0.0	1.0
2008	5	44	23	0.0	1.0	2008	5	106	23	0.0	1.0	2008	6	54	23	0.0	1.0
2008	5	45	1	0.0	1.0	2008	5	107	1	0.0	1.0	2008	6	55	1	0.0	1.0
2008	5	45	23	0.0	1.0	2008	5	108	23	0.0	1.0	2008	6	55	23	0.0	1.0
2008	5	46	1	0.0	1.0	2008	5	109	1	0.0	1.0	2008	6	56	1	0.0	1.0
2008	5	46	23	0.0	1.0	2008	5	110	23	0.0	1.0	2008	6	56	23	0.0	1.0
2008	5	47	1	0.0	1.0	2008											



## Hourly Capacity Pattern 18 (continued)

[illegible]

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Hourly Capacity Pattern 18 (continued)

Yr	Prd	Start	Cap	OM	Yr	Prd	Start	Cap	OM	Yr	Prd	Start	Cap	OM	Yr	Prd	Start	Cap	OM
Day	Day	Day	Multiplier	Multiplier	Day	Day	Day	Multiplier	Multiplier	Day	Day	Day	Multiplier	Multiplier	Day	Day	Day	Multiplier	Multiplier
2008	1	1	1.0	1.0	2008	1	1	1.0	1.0	2008	1	1	1.0	1.0	2008	1	1	1.0	1.0
2008	2	2	1.0	1.0	2008	2	2	1.0	1.0	2008	2	2	1.0	1.0	2008	2	2	1.0	1.0
2008	3	3	1.0	1.0	2008	3	3	1.0	1.0	2008	3	3	1.0	1.0	2008	3	3	1.0	1.0
2008	4	4	1.0	1.0	2008	4	4	1.0	1.0	2008	4	4	1.0	1.0	2008	4	4	1.0	1.0
2008	5	5	1.0	1.0	2008	5	5	1.0	1.0	2008	5	5	1.0	1.0	2008	5	5	1.0	1.0
2008	6	6	1.0	1.0	2008	6	6	1.0	1.0	2008	6	6	1.0	1.0	2008	6	6	1.0	1.0
2008	7	7	1.0	1.0	2008	7	7	1.0	1.0	2008	7	7	1.0	1.0	2008	7	7	1.0	1.0
2008	8	8	1.0	1.0	2008	8	8	1.0	1.0	2008	8	8	1.0	1.0	2008	8	8	1.0	1.0
2008	9	9	1.0	1.0	2008	9	9	1.0	1.0	2008	9	9	1.0	1.0	2008	9	9	1.0	1.0
2008	10	10	1.0	1.0	2008	10	10	1.0	1.0	2008	10	10	1.0	1.0	2008	10	10	1.0	1.0
2008	11	11	1.0	1.0	2008	11	11	1.0	1.0	2008	11	11	1.0	1.0	2008	11	11	1.0	1.0
2008	12	12	1.0	1.0	2008	12	12	1.0	1.0	2008	12	12	1.0	1.0	2008	12	12	1.0	1.0
2008	13	13	1.0	1.0	2008	13	13	1.0	1.0	2008	13	13	1.0	1.0	2008	13	13	1.0	1.0
2008	14	14	1.0	1.0	2008	14	14	1.0	1.0	2008	14	14	1.0	1.0	2008	14	14	1.0	1.0
2008	15	15	1.0	1.0	2008	15	15	1.0	1.0	2008	15	15	1.0	1.0	2008	15	15	1.0	1.0
2008	16	16	1.0	1.0	2008	16	16	1.0	1.0	2008	16	16	1.0	1.0	2008	16	16	1.0	1.0
2008	17	17	1.0	1.0	2008	17	17	1.0	1.0	2008	17	17	1.0	1.0	2008	17	17	1.0	1.0
2008	18	18	1.0	1.0	2008	18	18	1.0	1.0	2008	18	18	1.0	1.0	2008	18	18	1.0	1.0
2008	19	19	1.0	1.0	2008	19	19	1.0	1.0	2008	19	19	1.0	1.0	2008	19	19	1.0	1.0
2008	20	20	1.0	1.0	2008	20	20	1.0	1.0	2008	20	20	1.0	1.0	2008	20	20	1.0	1.0
2008	21	21	1.0	1.0	2008	21	21	1.0	1.0	2008	21	21	1.0	1.0	2008	21	21	1.0	1.0
2008	22	22	1.0	1.0	2008	22	22	1.0	1.0	2008	22	22	1.0	1.0	2008	22	22	1.0	1.0
2008	23	23	1.0	1.0	2008	23	23	1.0	1.0	2008	23	23	1.0	1.0	2008	23	23	1.0	1.0
2008	24	24	1.0	1.0	2008	24	24	1.0	1.0	2008	24	24	1.0	1.0	2008	24	24	1.0	1.0
2008	25	25	1.0	1.0	2008	25	25	1.0	1.0	2008	25	25	1.0	1.0	2008	25	25	1.0	1.0
2008	26	26	1.0	1.0	2008	26	26	1.0	1.0	2008	26	26	1.0	1.0	2008	26	26	1.0	1.0
2008	27	27	1.0	1.0	2008	27	27	1.0	1.0	2008	27	27	1.0	1.0	2008	27	27	1.0	1.0
2008	28	28	1.0	1.0	2008	28	28	1.0	1.0	2008	28	28	1.0	1.0	2008	28	28	1.0	1.0
2008	29	29	1.0	1.0	2008	29	29	1.0	1.0	2008	29	29	1.0	1.0	2008	29	29	1.0	1.0
2008	30	30	1.0	1.0	2008	30	30	1.0	1.0	2008	30	30	1.0	1.0	2008	30	30	1.0	1.0
2008	31	31	1.0	1.0	2008	31	31	1.0	1.0	2008	31	31	1.0	1.0	2008	31	31	1.0	1.0



# Hourly Capacity Pattern 18 (continued)

Yr	Prd	Day	Start	Cap	OM	Yr	Prd	Day	Start	Cap	OM	Yr	Prd	Day	Start	Cap	OM
			Day	Multiplier	Multiplier				Day	Multiplier	Multiplier				Day	Multiplier	Multiplier
2008	11	1	1	1.0	1.0	2008	11	1	1	1.0	1.0	2008	11	1	1	1.0	1.0
2008	11	2	2	1.0	1.0	2008	11	2	2	1.0	1.0	2008	11	2	2	1.0	1.0
2008	11	3	3	1.0	1.0	2008	11	3	3	1.0	1.0	2008	11	3	3	1.0	1.0
2008	11	4	4	1.0	1.0	2008	11	4	4	1.0	1.0	2008	11	4	4	1.0	1.0
2008	11	5	5	1.0	1.0	2008	11	5	5	1.0	1.0	2008	11	5	5	1.0	1.0
2008	11	6	6	1.0	1.0	2008	11	6	6	1.0	1.0	2008	11	6	6	1.0	1.0
2008	11	7	7	1.0	1.0	2008	11	7	7	1.0	1.0	2008	11	7	7	1.0	1.0
2008	11	8	8	1.0	1.0	2008	11	8	8	1.0	1.0	2008	11	8	8	1.0	1.0
2008	11	9	9	1.0	1.0	2008	11	9	9	1.0	1.0	2008	11	9	9	1.0	1.0
2008	11	10	10	1.0	1.0	2008	11	10	10	1.0	1.0	2008	11	10	10	1.0	1.0
2008	11	11	11	1.0	1.0	2008	11	11	11	1.0	1.0	2008	11	11	11	1.0	1.0
2008	11	12	12	1.0	1.0	2008	11	12	12	1.0	1.0	2008	11	12	12	1.0	1.0
2008	11	13	13	1.0	1.0	2008	11	13	13	1.0	1.0	2008	11	13	13	1.0	1.0
2008	11	14	14	1.0	1.0	2008	11	14	14	1.0	1.0	2008	11	14	14	1.0	1.0
2008	11	15	15	1.0	1.0	2008	11	15	15	1.0	1.0	2008	11	15	15	1.0	1.0
2008	11	16	16	1.0	1.0	2008	11	16	16	1.0	1.0	2008	11	16	16	1.0	1.0
2008	11	17	17	1.0	1.0	2008	11	17	17	1.0	1.0	2008	11	17	17	1.0	1.0
2008	11	18	18	1.0	1.0	2008	11	18	18	1.0	1.0	2008	11	18	18	1.0	1.0
2008	11	19	19	1.0	1.0	2008	11	19	19	1.0	1.0	2008	11	19	19	1.0	1.0
2008	11	20	20	1.0	1.0	2008	11	20	20	1.0	1.0	2008	11	20	20	1.0	1.0
2008	11	21	21	1.0	1.0	2008	11	21	21	1.0	1.0	2008	11	21	21	1.0	1.0
2008	11	22	22	1.0	1.0	2008	11	22	22	1.0	1.0	2008	11	22	22	1.0	1.0
2008	11	23	23	1.0	1.0	2008	11	23	23	1.0	1.0	2008	11	23	23	1.0	1.0
2008	11	24	24	1.0	1.0	2008	11	24	24	1.0	1.0	2008	11	24	24	1.0	1.0
2008	11	25	25	1.0	1.0	2008	11	25	25	1.0	1.0	2008	11	25	25	1.0	1.0
2008	11	26	26	1.0	1.0	2008	11	26	26	1.0	1.0	2008	11	26	26	1.0	1.0
2008	11	27	27	1.0	1.0	2008	11	27	27	1.0	1.0	2008	11	27	27	1.0	1.0
2008	11	28	28	1.0	1.0	2008	11	28	28	1.0	1.0	2008	11	28	28	1.0	1.0
2008	11	29	29	1.0	1.0	2008	11	29	29	1.0	1.0	2008	11	29	29	1.0	1.0
2008	11	30	30	1.0	1.0	2008	11	30	30	1.0	1.0	2008	11	30	30	1.0	1.0



## Hourly Capacity Pattern 19

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**Hourly Capacity Pattern 19 (continued)**

Yr	Prd	Day	Hr	Cap	Multiplier	OM	Yr	Prd	Day	Hr	Cap	Multiplier	OM	Yr	Prd	Day	Hr	Cap	Multiplier	OM
2008	3	5	1	0.0	1.0	1.0	2008	3	24	22	0.0	1.0	1.0	2008	4	13	6	1.0	1.0	1.0
2008	3	6	1	1.0	1.0	1.0	2008	3	24	1	0.0	1.0	1.0	2008	4	13	22	0.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	24	6	1.0	1.0	1.0	2008	4	14	1	0.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	24	22	0.0	1.0	1.0	2008	4	14	6	1.0	1.0	1.0
2008	3	4	6	1.0	1.0	1.0	2008	3	25	1	0.0	1.0	1.0	2008	4	14	22	0.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	25	6	1.0	1.0	1.0	2008	4	15	1	0.0	1.0	1.0
2008	3	5	1	0.0	1.0	1.0	2008	3	25	22	0.0	1.0	1.0	2008	4	15	6	1.0	1.0	1.0
2008	3	6	6	1.0	1.0	1.0	2008	3	26	1	0.0	1.0	1.0	2008	4	15	22	0.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	26	6	1.0	1.0	1.0	2008	4	16	1	0.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	26	22	0.0	1.0	1.0	2008	4	16	6	1.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	27	1	0.0	1.0	1.0	2008	4	16	22	0.0	1.0	1.0
2008	3	5	1	0.0	1.0	1.0	2008	3	27	6	1.0	1.0	1.0	2008	4	17	1	0.0	1.0	1.0
2008	3	6	6	1.0	1.0	1.0	2008	3	27	22	0.0	1.0	1.0	2008	4	17	6	1.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	28	1	0.0	1.0	1.0	2008	4	17	22	0.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	28	6	1.0	1.0	1.0	2008	4	18	1	0.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	28	22	0.0	1.0	1.0	2008	4	18	6	1.0	1.0	1.0
2008	3	5	1	0.0	1.0	1.0	2008	3	29	1	0.0	1.0	1.0	2008	4	18	22	0.0	1.0	1.0
2008	3	6	6	1.0	1.0	1.0	2008	3	29	6	1.0	1.0	1.0	2008	4	19	1	0.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	29	22	0.0	1.0	1.0	2008	4	19	6	1.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	30	1	0.0	1.0	1.0	2008	4	19	22	0.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	30	6	1.0	1.0	1.0	2008	4	20	1	0.0	1.0	1.0
2008	3	5	1	0.0	1.0	1.0	2008	3	30	22	0.0	1.0	1.0	2008	4	20	6	1.0	1.0	1.0
2008	3	6	6	1.0	1.0	1.0	2008	3	31	1	0.0	1.0	1.0	2008	4	20	22	0.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	31	6	1.0	1.0	1.0	2008	4	21	1	0.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	31	22	0.0	1.0	1.0	2008	4	21	6	1.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	32	1	0.0	1.0	1.0	2008	4	21	22	0.0	1.0	1.0
2008	3	5	1	0.0	1.0	1.0	2008	3	32	6	1.0	1.0	1.0	2008	4	22	1	0.0	1.0	1.0
2008	3	6	6	1.0	1.0	1.0	2008	3	32	22	0.0	1.0	1.0	2008	4	22	6	1.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	33	1	0.0	1.0	1.0	2008	4	23	1	0.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	33	6	1.0	1.0	1.0	2008	4	23	6	1.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	34	1	0.0	1.0	1.0	2008	4	23	22	0.0	1.0	1.0
2008	3	5	1	0.0	1.0	1.0	2008	3	34	6	1.0	1.0	1.0	2008	4	24	1	0.0	1.0	1.0
2008	3	6	6	1.0	1.0	1.0	2008	3	34	22	0.0	1.0	1.0	2008	4	24	6	1.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	35	1	0.0	1.0	1.0	2008	4	24	22	0.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	35	6	1.0	1.0	1.0	2008	4	25	1	0.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	35	22	0.0	1.0	1.0	2008	4	25	6	1.0	1.0	1.0
2008	3	5	1	0.0	1.0	1.0	2008	3	36	1	0.0	1.0	1.0	2008	4	25	22	0.0	1.0	1.0
2008	3	6	6	1.0	1.0	1.0	2008	3	36	6	1.0	1.0	1.0	2008	4	26	1	0.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	36	22	0.0	1.0	1.0	2008	4	26	6	1.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	37	1	0.0	1.0	1.0	2008	4	26	22	0.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	37	6	1.0	1.0	1.0	2008	4	27	1	0.0	1.0	1.0
2008	3	5	1	0.0	1.0	1.0	2008	3	37	22	0.0	1.0	1.0	2008	4	27	6	1.0	1.0	1.0
2008	3	6	6	1.0	1.0	1.0	2008	3	38	1	0.0	1.0	1.0	2008	4	27	22	0.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	38	6	1.0	1.0	1.0	2008	4	28	1	0.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	38	22	0.0	1.0	1.0	2008	4	28	6	1.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	39	1	0.0	1.0	1.0	2008	4	28	22	0.0	1.0	1.0
2008	3	5	1	0.0	1.0	1.0	2008	3	39	6	1.0	1.0	1.0	2008	4	29	1	0.0	1.0	1.0
2008	3	6	6	1.0	1.0	1.0	2008	3	39	22	0.0	1.0	1.0	2008	4	29	6	1.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	40	1	0.0	1.0	1.0	2008	4	29	22	0.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	40	6	1.0	1.0	1.0	2008	4	30	1	0.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	40	22	0.0	1.0	1.0	2008	4	30	6	1.0	1.0	1.0
2008	3	5	1	0.0	1.0	1.0	2008	3	41	1	0.0	1.0	1.0	2008	4	30	22	0.0	1.0	1.0
2008	3	6	6	1.0	1.0	1.0	2008	3	41	6	1.0	1.0	1.0	2008	4	31	1	0.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	41	22	0.0	1.0	1.0	2008	4	31	6	1.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	42	1	0.0	1.0	1.0	2008	4	31	22	0.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	42	6	1.0	1.0	1.0	2008	4	32	1	0.0	1.0	1.0
2008	3	5	1	0.0	1.0	1.0	2008	3	42	22	0.0	1.0	1.0	2008	4	32	6	1.0	1.0	1.0
2008	3	6	6	1.0	1.0	1.0	2008	3	43	1	0.0	1.0	1.0	2008	4	32	22	0.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	43	6	1.0	1.0	1.0	2008	4	33	1	0.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	43	22	0.0	1.0	1.0	2008	4	33	6	1.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	44	1	0.0	1.0	1.0	2008	4	33	22	0.0	1.0	1.0
2008	3	5	1	0.0	1.0	1.0	2008	3	44	6	1.0	1.0	1.0	2008	4	34	1	0.0	1.0	1.0
2008	3	6	6	1.0	1.0	1.0	2008	3	44	22	0.0	1.0	1.0	2008	4	34	6	1.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	45	1	0.0	1.0	1.0	2008	4	34	22	0.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	45	6	1.0	1.0	1.0	2008	4	35	1	0.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	45	22	0.0	1.0	1.0	2008	4	35	6	1.0	1.0	1.0
2008	3	5	1	0.0	1.0	1.0	2008	3	46	1	0.0	1.0	1.0	2008	4	35	22	0.0	1.0	1.0
2008	3	6	6	1.0	1.0	1.0	2008	3	46	6	1.0	1.0	1.0	2008	4	36	1	0.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	46	22	0.0	1.0	1.0	2008	4	36	6	1.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	47	1	0.0	1.0	1.0	2008	4	36	22	0.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	47	6	1.0	1.0	1.0	2008	4	37	1	0.0	1.0	1.0
2008	3	5	1	0.0	1.0	1.0	2008	3	47	22	0.0	1.0	1.0	2008	4	37	6	1.0	1.0	1.0
2008	3	6	6	1.0	1.0	1.0	2008	3	48	1	0.0	1.0	1.0	2008	4	37	22	0.0	1.0	1.0
2008	3	7	22	0.0	1.0	1.0	2008	3	48	6	1.0	1.0	1.0	2008	4	38	1	0.0	1.0	1.0
2008	3	8	4	1.0	1.0	1.0	2008	3	48	22	0.0	1.0	1.0	2008	4	38	6	1.0	1.0	1.0
2008	3	4	22	0.0	1.0	1.0	2008	3	49	1	0.0	1.0	1.0	2008	4	38	22	0.0	1.0	1.0
2008																				



MECO Calibration Factor Report  
Year 2008  
Appendix A Workpapers  
Page 65 of 75

## Hourly Capacity Pattern 19 (continued)

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Hourly Capacity Pattern 19 (continued)

Yr	Prd	Day	Hr	Start	Cap	OM	Yr	Prd	Day	Hr	Start	Cap	OM	Yr	Prd	Day	Hr	Start	Cap	OM
2008	8	14	44	1	0.0	1.0	2008	9	1	6	1	0.0	1.0	2008	9	24	44	1	0.0	1.0
2008	8	14	45	1	0.0	1.0	2008	9	2	6	1	0.0	1.0	2008	9	24	45	1	0.0	1.0
2008	8	14	46	1	0.0	1.0	2008	9	3	6	1	0.0	1.0	2008	9	24	46	1	0.0	1.0
2008	8	14	47	1	0.0	1.0	2008	9	4	6	1	0.0	1.0	2008	9	24	47	1	0.0	1.0
2008	8	14	48	1	0.0	1.0	2008	9	5	6	1	0.0	1.0	2008	9	24	48	1	0.0	1.0
2008	8	14	49	1	0.0	1.0	2008	9	6	6	1	0.0	1.0	2008	9	24	49	1	0.0	1.0
2008	8	14	50	1	0.0	1.0	2008	9	7	6	1	0.0	1.0	2008	9	24	50	1	0.0	1.0
2008	8	14	51	1	0.0	1.0	2008	9	8	6	1	0.0	1.0	2008	9	24	51	1	0.0	1.0
2008	8	14	52	1	0.0	1.0	2008	9	9	6	1	0.0	1.0	2008	9	24	52	1	0.0	1.0
2008	8	15	1	1	0.0	1.0	2008	9	10	6	1	0.0	1.0	2008	9	25	1	1	0.0	1.0
2008	8	15	2	1	0.0	1.0	2008	9	11	6	1	0.0	1.0	2008	9	25	2	1	0.0	1.0
2008	8	15	3	1	0.0	1.0	2008	9	12	6	1	0.0	1.0	2008	9	25	3	1	0.0	1.0
2008	8	15	4	1	0.0	1.0	2008	9	13	6	1	0.0	1.0	2008	9	25	4	1	0.0	1.0
2008	8	15	5	1	0.0	1.0	2008	9	14	6	1	0.0	1.0	2008	9	25	5	1	0.0	1.0
2008	8	15	6	1	0.0	1.0	2008	9	15	6	1	0.0	1.0	2008	9	25	6	1	0.0	1.0
2008	8	15	7	1	0.0	1.0	2008	9	16	6	1	0.0	1.0	2008	9	25	7	1	0.0	1.0
2008	8	15	8	1	0.0	1.0	2008	9	17	6	1	0.0	1.0	2008	9	25	8	1	0.0	1.0
2008	8	15	9	1	0.0	1.0	2008	9	18	6	1	0.0	1.0	2008	9	25	9	1	0.0	1.0
2008	8	15	10	1	0.0	1.0	2008	9	19	6	1	0.0	1.0	2008	9	25	10	1	0.0	1.0
2008	8	15	11	1	0.0	1.0	2008	9	20	6	1	0.0	1.0	2008	9	25	11	1	0.0	1.0
2008	8	15	12	1	0.0	1.0	2008	9	21	6	1	0.0	1.0	2008	9	25	12	1	0.0	1.0
2008	8	15	13	1	0.0	1.0	2008	9	22	6	1	0.0	1.0	2008	9	25	13	1	0.0	1.0
2008	8	15	14	1	0.0	1.0	2008	9	23	6	1	0.0	1.0	2008	9	25	14	1	0.0	1.0
2008	8	15	15	1	0.0	1.0	2008	9	24	6	1	0.0	1.0	2008	9	25	15	1	0.0	1.0
2008	8	15	16	1	0.0	1.0	2008	9	25	6	1	0.0	1.0	2008	9	25	16	1	0.0	1.0
2008	8	15	17	1	0.0	1.0	2008	9	26	6	1	0.0	1.0	2008	9	25	17	1	0.0	1.0
2008	8	15	18	1	0.0	1.0	2008	9	27	6	1	0.0	1.0	2008	9	25	18	1	0.0	1.0
2008	8	15	19	1	0.0	1.0	2008	9	28	6	1	0.0	1.0	2008	9	25	19	1	0.0	1.0
2008	8	15	20	1	0.0	1.0	2008	9	29	6	1	0.0	1.0	2008	9	25	20	1	0.0	1.0
2008	8	15	21	1	0.0	1.0	2008	9	30	6	1	0.0	1.0	2008	9	25	21	1	0.0	1.0
2008	8	15	22	1	0.0	1.0	2008	9	31	6	1	0.0	1.0	2008	9	25	22	1	0.0	1.0
2008	8	15	23	1	0.0	1.0	2008	9	32	6	1	0.0	1.0	2008	9	25	23	1	0.0	1.0
2008	8	15	24	1	0.0	1.0	2008	9	33	6	1	0.0	1.0	2008	9	25	24	1	0.0	1.0
2008	8	15	25	1	0.0	1.0	2008	9	34	6	1	0.0	1.0	2008	9	25	25	1	0.0	1.0
2008	8	15	26	1	0.0	1.0	2008	9	35	6	1	0.0	1.0	2008	9	25	26	1	0.0	1.0
2008	8	15	27	1	0.0	1.0	2008	9	36	6	1	0.0	1.0	2008	9	25	27	1	0.0	1.0
2008	8	15	28	1	0.0	1.0	2008	9	37	6	1	0.0	1.0	2008	9	25	28	1	0.0	1.0
2008	8	15	29	1	0.0	1.0	2008	9	38	6	1	0.0	1.0	2008	9	25	29	1	0.0	1.0
2008	8	15	30	1	0.0	1.0	2008	9	39	6	1	0.0	1.0	2008	9	25	30	1	0.0	1.0
2008	8	15	31	1	0.0	1.0	2008	9	40	6	1	0.0	1.0	2008	9	25	31	1	0.0	1.0
2008	8	15	32	1	0.0	1.0	2008	9	41	6	1	0.0	1.0	2008	9	25	32	1	0.0	1.0
2008	8	15	33	1	0.0	1.0	2008	9	42	6	1	0.0	1.0	2008	9	25	33	1	0.0	1.0
2008	8	15	34	1	0.0	1.0	2008	9	43	6	1	0.0	1.0	2008	9	25	34	1	0.0	1.0
2008	8	15	35	1	0.0	1.0	2008	9	44	6	1	0.0	1.0	2008	9	25	35	1	0.0	1.0
2008	8	15	36	1	0.0	1.0	2008	9	45	6	1	0.0	1.0	2008	9	25	36	1	0.0	1.0
2008	8	15	37	1	0.0	1.0	2008	9	46	6	1	0.0	1.0	2008	9	25	37	1	0.0	1.0
2008	8	15	38	1	0.0	1.0	2008	9	47	6	1	0.0	1.0	2008	9	25	38	1	0.0	1.0
2008	8	15	39	1	0.0	1.0	2008	9	48	6	1	0.0	1.0	2008	9	25	39	1	0.0	1.0
2008	8	15	40	1	0.0	1.0	2008	9	49	6	1	0.0	1.0	2008	9	25	40	1	0.0	1.0
2008	8	15	41	1	0.0	1.0	2008	9	50	6	1	0.0	1.0	2008	9	25	41	1	0.0	1.0
2008	8	15	42	1	0.0	1.0	2008	9	51	6	1	0.0	1.0	2008	9	25	42	1	0.0	1.0
2008	8	15	43	1	0.0	1.0	2008	9	52	6	1	0.0	1.0	2008	9	25	43	1	0.0	1.0
2008	8	15	44	1	0.0	1.0	2008	9	53	6	1	0.0	1.0	2008	9	25	44	1	0.0	1.0
2008	8	15	45	1	0.0	1.0	2008	9	54	6	1	0.0	1.0	2008	9	25	45	1	0.0	1.0
2008	8	15	46	1	0.0	1.0	2008	9	55	6	1	0.0	1.0	2008	9	25	46	1	0.0	1.0
2008	8	15	47	1	0.0	1.0	2008	9	56	6	1	0.0	1.0	2008	9	25	47	1	0.0	1.0
2008	8	15	48	1	0.0	1.0	2008	9	57	6	1	0.0	1.0	2008	9	25	48	1	0.0	1.0
2008	8	15	49	1	0.0	1.0	2008	9	58	6	1	0.0	1.0	2008	9	25	49	1	0.0	1.0
2008	8	15	50	1	0.0	1.0	2008	9	59	6	1	0.0	1.0	2008	9	25	50	1	0.0	1.0
2008	8	15	51	1	0.0	1.0	2008	9	60	6	1	0.0	1.0	2008	9	25	51	1	0.0	1.0
2008	8	15	52	1	0.0	1.0	2008	9	61	6	1	0.0	1.0	2008	9	25	52	1	0.0	1.0
2008	8	15	53	1	0.0	1.0	2008	9	62	6	1	0.0	1.0	2008	9	25	53	1	0.0	1.0
2008	8	15	54	1	0.0	1.0	2008	9	63	6	1	0.0	1.0	2008	9	25	54	1	0.0	1.0
2008	8	15	55	1	0.0	1.0	2008	9	64	6	1	0.0	1.0	2008	9	25	55	1	0.0	1.0
2008	8	15	56	1	0.0	1.0	2008	9	65	6	1	0.0	1.0	2008	9	25	56	1	0.0	1.0
2008	8	15	57	1	0.0	1.0	2008	9	66	6	1	0.0	1.0	2008	9	25	57	1	0.0	1.0
2008	8	15	58	1	0.0	1.0	2008	9	67	6	1	0.0	1.0	2008	9	25	58	1	0.0	1.0
2008	8	15	59	1	0.0	1.0	2008	9	68	6	1	0.0	1.0	2008	9	25	59	1	0.0	1.0
2008	8	15	60	1	0.0	1.0	2008	9	69	6	1	0.0	1.0	2008	9	25	60	1	0.0	1.0
2008	8	15	61	1	0.0	1.0	2008	9	70	6	1	0.0	1.0	2008	9	25	61	1	0.0	1.0
2008	8	15	62	1	0.0	1.0	2008	9	71	6	1	0.0	1.0	2008	9	25	62	1	0.0	1.0
2008	8	15	63	1	0.0	1.0	2008	9	72	6	1	0.0	1.0	2008	9	25	63	1	0.0	1.0
2008	8	15	64	1	0.0	1.0	2008	9	73	6	1	0.0	1.0	2008	9	25	64	1	0.0	1.0
2008	8	15	65	1	0.0	1.0	2008	9	74	6	1	0.0	1.0	2008	9	25	65	1	0.0	1.0
2008	8	15	66	1	0.0	1.0	2008	9	75	6	1	0.0	1.0	2008	9	25	66	1	0.0	1.0
2008	8	15	67	1	0.0	1.0	2008	9	76	6	1	0.0	1.0	2008	9	25	67	1	0.0	1.0
2008	8	15	68	1	0.0	1.0	2008	9	77	6	1	0.0	1.0	2008						



# Hourly Capacity Pattern 19 (continued)

Yr	Prd	Start Day	Start Hr	Cap Multiplier	OM Multiplier	Yr	Prd	Start Day	Start Hr	Cap Multiplier	OM Multiplier	Yr	Prd	Start Day	Start Hr	Cap Multiplier	OM Multiplier
2008	10	14	22	0.0	1.0	2008	11	4	6	1.0	1.0	2008	11	4	6	1.0	1.0
2008	10	15	1	0.0	1.0	2008	11	5	7	1.0	1.0	2008	11	5	7	1.0	1.0
2008	10	16	2	0.0	1.0	2008	11	6	8	1.0	1.0	2008	11	6	8	1.0	1.0
2008	10	17	3	0.0	1.0	2008	11	7	9	1.0	1.0	2008	11	7	9	1.0	1.0
2008	10	18	4	0.0	1.0	2008	11	8	10	1.0	1.0	2008	11	8	10	1.0	1.0
2008	10	19	5	0.0	1.0	2008	11	9	11	1.0	1.0	2008	11	9	11	1.0	1.0
2008	10	20	6	0.0	1.0	2008	11	10	12	1.0	1.0	2008	11	10	12	1.0	1.0
2008	10	21	7	0.0	1.0	2008	11	11	13	1.0	1.0	2008	11	11	13	1.0	1.0
2008	10	22	8	0.0	1.0	2008	11	12	14	1.0	1.0	2008	11	12	14	1.0	1.0
2008	10	23	9	0.0	1.0	2008	11	13	15	1.0	1.0	2008	11	13	15	1.0	1.0
2008	10	24	10	0.0	1.0	2008	11	14	16	1.0	1.0	2008	11	14	16	1.0	1.0
2008	10	25	11	0.0	1.0	2008	11	15	17	1.0	1.0	2008	11	15	17	1.0	1.0
2008	10	26	12	0.0	1.0	2008	11	16	18	1.0	1.0	2008	11	16	18	1.0	1.0
2008	10	27	13	0.0	1.0	2008	11	17	19	1.0	1.0	2008	11	17	19	1.0	1.0
2008	10	28	14	0.0	1.0	2008	11	18	20	1.0	1.0	2008	11	18	20	1.0	1.0
2008	10	29	15	0.0	1.0	2008	11	19	21	1.0	1.0	2008	11	19	21	1.0	1.0
2008	10	30	16	0.0	1.0	2008	11	20	22	1.0	1.0	2008	11	20	22	1.0	1.0
2008	10	31	17	0.0	1.0	2008	11	21	23	1.0	1.0	2008	11	21	23	1.0	1.0
2008	10	32	18	0.0	1.0	2008	11	22	24	1.0	1.0	2008	11	22	24	1.0	1.0
2008	10	33	19	0.0	1.0	2008	11	23	25	1.0	1.0	2008	11	23	25	1.0	1.0
2008	10	34	20	0.0	1.0	2008	11	24	26	1.0	1.0	2008	11	24	26	1.0	1.0
2008	10	35	21	0.0	1.0	2008	11	25	27	1.0	1.0	2008	11	25	27	1.0	1.0
2008	10	36	22	0.0	1.0	2008	11	26	28	1.0	1.0	2008	11	26	28	1.0	1.0
2008	10	37	23	0.0	1.0	2008	11	27	29	1.0	1.0	2008	11	27	29	1.0	1.0
2008	10	38	24	0.0	1.0	2008	11	28	30	1.0	1.0	2008	11	28	30	1.0	1.0
2008	10	39	25	0.0	1.0	2008	11	29	31	1.0	1.0	2008	11	29	31	1.0	1.0
2008	10	40	26	0.0	1.0	2008	11	30	32	1.0	1.0	2008	11	30	32	1.0	1.0
2008	10	41	27	0.0	1.0	2008	11	31	33	1.0	1.0	2008	11	31	33	1.0	1.0
2008	10	42	28	0.0	1.0	2008	11	32	34	1.0	1.0	2008	11	32	34	1.0	1.0
2008	10	43	29	0.0	1.0	2008	11	33	35	1.0	1.0	2008	11	33	35	1.0	1.0
2008	10	44	30	0.0	1.0	2008	11	34	36	1.0	1.0	2008	11	34	36	1.0	1.0
2008	10	45	31	0.0	1.0	2008	11	35	37	1.0	1.0	2008	11	35	37	1.0	1.0
2008	10	46	32	0.0	1.0	2008	11	36	38	1.0	1.0	2008	11	36	38	1.0	1.0
2008	10	47	33	0.0	1.0	2008	11	37	39	1.0	1.0	2008	11	37	39	1.0	1.0
2008	10	48	34	0.0	1.0	2008	11	38	40	1.0	1.0	2008	11	38	40	1.0	1.0
2008	10	49	35	0.0	1.0	2008	11	39	41	1.0	1.0	2008	11	39	41	1.0	1.0
2008	10	50	36	0.0	1.0	2008	11	40	42	1.0	1.0	2008	11	40	42	1.0	1.0
2008	10	51	37	0.0	1.0	2008	11	41	43	1.0	1.0	2008	11	41	43	1.0	1.0
2008	10	52	38	0.0	1.0	2008	11	42	44	1.0	1.0	2008	11	42	44	1.0	1.0
2008	10	53	39	0.0	1.0	2008	11	43	45	1.0	1.0	2008	11	43	45	1.0	1.0
2008	10	54	40	0.0	1.0	2008	11	44	46	1.0	1.0	2008	11	44	46	1.0	1.0
2008	10	55	41	0.0	1.0	2008	11	45	47	1.0	1.0	2008	11	45	47	1.0	1.0
2008	10	56	42	0.0	1.0	2008	11	46	48	1.0	1.0	2008	11	46	48	1.0	1.0
2008	10	57	43	0.0	1.0	2008	11	47	49	1.0	1.0	2008	11	47	49	1.0	1.0
2008	10	58	44	0.0	1.0	2008	11	48	50	1.0	1.0	2008	11	48	50	1.0	1.0
2008	10	59	45	0.0	1.0	2008	11	49	51	1.0	1.0	2008	11	49	51	1.0	1.0
2008	10	60	46	0.0	1.0	2008	11	50	52	1.0	1.0	2008	11	50	52	1.0	1.0
2008	10	61	47	0.0	1.0	2008	11	51	53	1.0	1.0	2008	11	51	53	1.0	1.0
2008	10	62	48	0.0	1.0	2008	11	52	54	1.0	1.0	2008	11	52	54	1.0	1.0
2008	10	63	49	0.0	1.0	2008	11	53	55	1.0	1.0	2008	11	53	55	1.0	1.0
2008	10	64	50	0.0	1.0	2008	11	54	56	1.0	1.0	2008	11	54	56	1.0	1.0
2008	10	65	51	0.0	1.0	2008	11	55	57	1.0	1.0	2008	11	55	57	1.0	1.0
2008	10	66	52	0.0	1.0	2008	11	56	58	1.0	1.0	2008	11	56	58	1.0	1.0
2008	10	67	53	0.0	1.0	2008	11	57	59	1.0	1.0	2008	11	57	59	1.0	1.0
2008	10	68	54	0.0	1.0	2008	11	58	60	1.0	1.0	2008	11	58	60	1.0	1.0
2008	10	69	55	0.0	1.0	2008	11	59	61	1.0	1.0	2008	11	59	61	1.0	1.0
2008	10	70	56	0.0	1.0	2008	11	60	62	1.0	1.0	2008	11	60	62	1.0	1.0
2008	10	71	57	0.0	1.0	2008	11	61	63	1.0	1.0	2008	11	61	63	1.0	1.0
2008	10	72	58	0.0	1.0	2008	11	62	64	1.0	1.0	2008	11	62	64	1.0	1.0
2008	10	73	59	0.0	1.0	2008	11	63	65	1.0	1.0	2008	11	63	65	1.0	1.0
2008	10	74	60	0.0	1.0	2008	11	64	66	1.0	1.0	2008	11	64	66	1.0	1.0
2008	10	75	61	0.0	1.0	2008	11	65	67	1.0	1.0	2008	11	65	67	1.0	1.0
2008	10	76	62	0.0	1.0	2008	11	66	68	1.0	1.0	2008	11	66	68	1.0	1.0
2008	10	77	63	0.0	1.0	2008	11	67	69	1.0	1.0	2008	11	67	69	1.0	1.0
2008	10	78	64	0.0	1.0	2008	11	68	70	1.0	1.0	2008	11	68	70	1.0	1.0
2008	10	79	65	0.0	1.0	2008	11	69	71	1.0	1.0	2008	11	69	71	1.0	1.0
2008	10	80	66	0.0	1.0	2008	11	70	72	1.0	1.0	2008	11	70	72	1.0	1.0
2008	10	81	67	0.0	1.0	2008	11	71	73	1.0	1.0	2008	11	71	73	1.0	1.0
2008	10	82	68	0.0	1.0	2008	11	72	74	1.0	1.0	2008	11	72	74	1.0	1.0
2008	10	83	69	0.0	1.0	2008	11	73	75	1.0	1.0	2008	11	73	75	1.0	1.0
2008	10	84	70	0.0	1.0	2008	11	74	76	1.0	1.0	2008	11	74	76	1.0	1.0
2008	10	85	71	0.0	1.0	2008	11	75	77	1.0	1.0	2008	11	75	77	1.0	1.0
2008	10	86	72	0.0	1.0	2008	11	76	78	1.0	1.0	2008	11	76	78	1.0	1.0
2008	10	87	73	0.0	1.0	2008	11	77	79	1.0	1.0	2008	11	77	79	1.0	1.0
2008	10	88	74	0.0	1.0	2008	11	78	80	1.0	1.0	2008	11	78	80	1.0	1.0
2008	10	89	75	0.0	1.0	2008	11	79	81	1.0	1.0	2008	11	79	81	1.0	1.0
2008	10	90	76	0.0	1.0	2008	11	80	82	1.0	1.0	2008	11	80	82	1.0	1.0
2008	10	91	77	0.0	1.0	2008	11	81	83	1.0	1.0	2008	11	81	83	1.0	1.0
2008	10	92	78	0.0	1.0	2008	11	82	84	1.0	1.0	2008	11	82	84	1.0	1.0
2008	10	93	79	0.0	1.0	2008	11	83	85	1.0	1.0	2008	11	83	85	1.0	1.0
2008	10	94	80	0.0	1.0	2008	11	84	86	1.0	1.0	2008	11	84	86	1.0	1.0
2008	10	95	81	0.0	1.0	2008	11	85	87	1.0	1.0	2008	11	85	87	1.0	1.0
2008	10	96	82	0.0	1.0	2008	11	86	88	1.0	1.0	2008	11	86	88	1.0	1.0
2008	10	97	83	0.0	1.0	2008	11	87	89	1.0	1.0	2008	11	87	89	1.0	1.0
2008	10	98	84	0.0	1.0	2008	11	88	90	1.0	1.0	2008	11	88</			



## Hourly Capacity Pattern 19 (continued)

Yr.	Prd	Start Day	Start Hr	Multiplier	Cap	On
2008	1	10	2	0.0	0.0	1.0
2008	1	10	2	0.0	0.0	1.0
2008	12	16	1	0.0	0.0	1.0
2008	12	16	1	0.0	0.0	1.0
2008	12	16	2	0.0	0.0	1.0
2008	12	17	1	0.0	0.0	1.0
2008	12	17	6	1.0	1.0	1.0
2008	12	17	6	0.0	0.0	1.0
2008	12	17	6	0.0	0.0	1.0
2008	12	18	1	0.0	0.0	1.0
2008	12	18	1	0.0	0.0	1.0
2008	12	18	6	1.0	1.0	1.0
2008	12	19	1	0.0	0.0	1.0
2008	12	19	1	0.0	0.0	1.0
2008	12	19	6	1.0	1.0	1.0
2008	12	19	6	1.0	1.0	1.0
2008	12	20	1	0.0	0.0	1.0
2008	12	20	6	1.0	1.0	1.0
2008	12	20	6	1.0	1.0	1.0
2008	12	20	6	1.0	1.0	1.0
2008	12	21	1	0.0	0.0	1.0
2008	12	21	6	1.0	1.0	1.0
2008	12	21	6	1.0	1.0	1.0
2008	12	22	1	0.0	0.0	1.0
2008	12	22	6	1.0	1.0	1.0
2008	12	22	6	1.0	1.0	1.0
2008	12	23	1	0.0	0.0	1.0
2008	12	23	6	1.0	1.0	1.0
2008	12	23	6	1.0	1.0	1.0
2008	12	24	1	0.0	0.0	1.0
2008	12	24	6	1.0	1.0	1.0
2008	12	24	6	1.0	1.0	1.0
2008	12	25	1	0.0	0.0	1.0
2008	12	25	6	1.0	1.0	1.0
2008	12	25	6	1.0	1.0	1.0
2008	12	26	1	0.0	0.0	1.0
2008	12	26	6	1.0	1.0	1.0
2008	12	26	6	1.0	1.0	1.0
2008	12	27	1	0.0	0.0	1.0
2008	12	27	1	0.0	0.0	1.0
2008	12	27	6	1.0	1.0	1.0
2008	12	27	6	1.0	1.0	1.0
2008	12	28	1	0.0	0.0	1.0
2008	12	28	1	0.0	0.0	1.0
2008	12	28	6	1.0	1.0	1.0
2008	12	28	6	1.0	1.0	1.0
2008	12	29	1	0.0	0.0	1.0
2008	12	29	6	1.0	1.0	1.0
2008	12	29	6	1.0	1.0	1.0
2008	12	30	1	0.0	0.0	1.0
2008	12	30	6	1.0	1.0	1.0
2008	12	30	6	1.0	1.0	1.0
2008	12	31	1	0.0	0.0	1.0
2008	12	31	1	0.0	0.0	1.0
2008	12	31	6	1.0	1.0	1.0
2008	12	31	6	1.0	1.0	1.0
2008	12	31	6	1.0	1.0	1.0



## Hourly Capacity Pattern 20

RPLUS program licensed to HECC



## Hourly Capacity Pattern 20 (continued)

PPLUS program licensed to HECO



Hourly Capacity Pattern 20 (continued)

Yr	Prd	Start Day	Start Hr	Cap Multiplier	OM Multiplier	Yr	Prd	Start Day	Start Hr	Cap Multiplier	OM Multiplier	Yr	Prd	Start Day	Start Hr	Cap Multiplier	OM Multiplier
2008	5	21	7	1.0	1.0	2008	6	11	1	1.0	1.0	2008	7	1	1	1.0	1.0
2008	5	22	4	0.0	1.0	2008	6	11	7	1.0	1.0	2008	7	1	7	1.0	1.0
2008	5	23	1	0.0	1.0	2008	6	12	1	1.0	1.0	2008	7	2	1	1.0	1.0
2008	5	24	1	0.0	1.0	2008	6	12	7	1.0	1.0	2008	7	2	7	1.0	1.0
2008	5	25	1	0.0	1.0	2008	6	13	1	1.0	1.0	2008	7	3	1	1.0	1.0
2008	5	26	1	0.0	1.0	2008	6	13	7	1.0	1.0	2008	7	3	7	1.0	1.0
2008	5	27	1	0.0	1.0	2008	6	14	1	1.0	1.0	2008	7	4	1	1.0	1.0
2008	5	28	1	0.0	1.0	2008	6	14	7	1.0	1.0	2008	7	4	7	1.0	1.0
2008	5	29	1	0.0	1.0	2008	6	15	1	1.0	1.0	2008	7	5	1	1.0	1.0
2008	5	30	1	0.0	1.0	2008	6	15	7	1.0	1.0	2008	7	5	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	16	1	1.0	1.0	2008	7	6	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	16	7	1.0	1.0	2008	7	6	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	17	1	1.0	1.0	2008	7	7	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	17	7	1.0	1.0	2008	7	7	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	18	1	1.0	1.0	2008	7	8	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	18	7	1.0	1.0	2008	7	8	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	19	1	1.0	1.0	2008	7	9	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	19	7	1.0	1.0	2008	7	9	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	20	1	1.0	1.0	2008	7	10	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	20	7	1.0	1.0	2008	7	10	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	21	1	1.0	1.0	2008	7	11	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	21	7	1.0	1.0	2008	7	11	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	22	1	1.0	1.0	2008	7	12	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	22	7	1.0	1.0	2008	7	12	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	23	1	1.0	1.0	2008	7	13	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	23	7	1.0	1.0	2008	7	13	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	24	1	1.0	1.0	2008	7	14	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	24	7	1.0	1.0	2008	7	14	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	25	1	1.0	1.0	2008	7	15	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	25	7	1.0	1.0	2008	7	15	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	26	1	1.0	1.0	2008	7	16	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	26	7	1.0	1.0	2008	7	16	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	27	1	1.0	1.0	2008	7	17	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	27	7	1.0	1.0	2008	7	17	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	28	1	1.0	1.0	2008	7	18	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	28	7	1.0	1.0	2008	7	18	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	29	1	1.0	1.0	2008	7	19	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	29	7	1.0	1.0	2008	7	19	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	30	1	1.0	1.0	2008	7	20	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	30	7	1.0	1.0	2008	7	20	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	31	1	1.0	1.0	2008	7	21	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	31	7	1.0	1.0	2008	7	21	7	1.0	1.0
2008	5	31	1	0.0	1.0	2008	6	31	1	1.0	1.0	2008	7	22	1	1.0	1.0
2008	5	31	7	1.0	1.0	2008	6	31	7	1.0	1.0	2008	7	22	7	1.0	1.0



Hourly Capacity Pattern 20 (continued)

Yr	Prd	Day	Start Day	Start Hr	Cap Multiplier	OM Multiplier	Yr	Prd	Day	Start Day	Start Hr	Cap Multiplier	OM Multiplier	Yr	Prd	Day	Start Day	Start Hr	Cap Multiplier	OM Multiplier
2008	7	22	2008	12	1.0	1.0	2008	8	12	2008	1	1.0	1.0	2008	9	1	2008	1	1.0	1.0
2008	7	23	2008	12	1.0	1.0	2008	8	13	2008	1	1.0	1.0	2008	9	2	2008	1	1.0	1.0
2008	7	24	2008	12	1.0	1.0	2008	8	14	2008	1	1.0	1.0	2008	9	3	2008	1	1.0	1.0
2008	7	25	2008	12	1.0	1.0	2008	8	15	2008	1	1.0	1.0	2008	9	4	2008	1	1.0	1.0
2008	7	26	2008	12	1.0	1.0	2008	8	16	2008	1	1.0	1.0	2008	9	5	2008	1	1.0	1.0
2008	7	27	2008	12	1.0	1.0	2008	8	17	2008	1	1.0	1.0	2008	9	6	2008	1	1.0	1.0
2008	7	28	2008	12	1.0	1.0	2008	8	18	2008	1	1.0	1.0	2008	9	7	2008	1	1.0	1.0
2008	7	29	2008	12	1.0	1.0	2008	8	19	2008	1	1.0	1.0	2008	9	8	2008	1	1.0	1.0
2008	7	30	2008	12	1.0	1.0	2008	8	20	2008	1	1.0	1.0	2008	9	9	2008	1	1.0	1.0
2008	8	1	2008	1	1.0	1.0	2008	9	1	2008	1	1.0	1.0	2008	10	1	2008	1	1.0	1.0
2008	8	2	2008	1	1.0	1.0	2008	9	2	2008	1	1.0	1.0	2008	10	2	2008	1	1.0	1.0
2008	8	3	2008	1	1.0	1.0	2008	9	3	2008	1	1.0	1.0	2008	10	3	2008	1	1.0	1.0
2008	8	4	2008	1	1.0	1.0	2008	9	4	2008	1	1.0	1.0	2008	10	4	2008	1	1.0	1.0
2008	8	5	2008	1	1.0	1.0	2008	9	5	2008	1	1.0	1.0	2008	10	5	2008	1	1.0	1.0
2008	8	6	2008	1	1.0	1.0	2008	9	6	2008	1	1.0	1.0	2008	10	6	2008	1	1.0	1.0
2008	8	7	2008	1	1.0	1.0	2008	9	7	2008	1	1.0	1.0	2008	10	7	2008	1	1.0	1.0
2008	8	8	2008	1	1.0	1.0	2008	9	8	2008	1	1.0	1.0	2008	10	8	2008	1	1.0	1.0
2008	8	9	2008	1	1.0	1.0	2008	9	9	2008	1	1.0	1.0	2008	10	9	2008	1	1.0	1.0
2008	8	10	2008	1	1.0	1.0	2008	9	10	2008	1	1.0	1.0	2008	10	10	2008	1	1.0	1.0
2008	8	11	2008	1	1.0	1.0	2008	9	11	2008	1	1.0	1.0	2008	10	11	2008	1	1.0	1.0
2008	8	12	2008	1	1.0	1.0	2008	9	12	2008	1	1.0	1.0	2008	10	12	2008	1	1.0	1.0
2008	8	13	2008	1	1.0	1.0	2008	9	13	2008	1	1.0	1.0	2008	10	13	2008	1	1.0	1.0
2008	8	14	2008	1	1.0	1.0	2008	9	14	2008	1	1.0	1.0	2008	10	14	2008	1	1.0	1.0
2008	8	15	2008	1	1.0	1.0	2008	9	15	2008	1	1.0	1.0	2008	10	15	2008	1	1.0	1.0
2008	8	16	2008	1	1.0	1.0	2008	9	16	2008	1	1.0	1.0	2008	10	16	2008	1	1.0	1.0
2008	8	17	2008	1	1.0	1.0	2008	9	17	2008	1	1.0	1.0	2008	10	17	2008	1	1.0	1.0
2008	8	18	2008	1	1.0	1.0	2008	9	18	2008	1	1.0	1.0	2008	10	18	2008	1	1.0	1.0
2008	8	19	2008	1	1.0	1.0	2008	9	19	2008	1	1.0	1.0	2008	10	19	2008	1	1.0	1.0
2008	8	20	2008	1	1.0	1.0	2008	9	20	2008	1	1.0	1.0	2008	10	20	2008	1	1.0	1.0
2008	8	21	2008	1	1.0	1.0	2008	9	21	2008	1	1.0	1.0	2008	10	21	2008	1	1.0	1.0
2008	8	22	2008	1	1.0	1.0	2008	9	22	2008	1	1.0	1.0	2008	10	22	2008	1	1.0	1.0
2008	8	23	2008	1	1.0	1.0	2008	9	23	2008	1	1.0	1.0	2008	10	23	2008	1	1.0	1.0
2008	8	24	2008	1	1.0	1.0	2008	9	24	2008	1	1.0	1.0	2008	10	24	2008	1	1.0	1.0
2008	8	25	2008	1	1.0	1.0	2008	9	25	2008	1	1.0	1.0	2008	10	25	2008	1	1.0	1.0
2008	8	26	2008	1	1.0	1.0	2008	9	26	2008	1	1.0	1.0	2008	10	26	2008	1	1.0	1.0
2008	8	27	2008	1	1.0	1.0	2008	9	27	2008	1	1.0	1.0	2008	10	27	2008	1	1.0	1.0
2008	8	28	2008	1	1.0	1.0	2008	9	28	2008	1	1.0	1.0	2008	10	28	2008	1	1.0	1.0
2008	8	29	2008	1	1.0	1.0	2008	9	29	2008	1	1.0	1.0	2008	10	29	2008	1	1.0	1.0
2008	8	30	2008	1	1.0	1.0	2008	9	30	2008	1	1.0	1.0	2008	10	30	2008	1	1.0	1.0
2008	9	1	2008	2	1.0	1.0	2008	10	1	2008	2	1.0	1.0	2008	11	1	2008	2	1.0	1.0
2008	9	2	2008	2	1.0	1.0	2008	10	2	2008	2	1.0	1.0	2008	11	2	2008	2	1.0	1.0
2008	9	3	2008	2	1.0	1.0	2008	10	3	2008	2	1.0	1.0	2008	11	3	2008	2	1.0	1.0
2008	9	4	2008	2	1.0	1.0	2008	10	4	2008	2	1.0	1.0	2008	11	4	2008	2	1.0	1.0
2008	9	5	2008	2	1.0	1.0	2008	10	5	2008	2	1.0	1.0	2008	11	5	2008	2	1.0	1.0
2008	9	6	2008	2	1.0	1.0	2008	10	6	2008	2	1.0	1.0	2008	11	6	2008	2	1.0	1.0
2008	9	7	2008	2	1.0	1.0	2008	10	7	2008	2	1.0	1.0	2008	11	7	2008	2	1.0	1.0
2008	9	8	2008	2	1.0	1.0	2008	10	8	2008	2	1.0	1.0	2008	11	8	2008	2	1.0	1.0
2008	9	9	2008	2	1.0	1.0	2008	10	9	2008	2	1.0	1.0	2008	11	9	2008	2	1.0	1.0
2008	9	10	2008	2	1.0	1.0	2008	10	10	2008	2	1.0	1.0	2008	11	10	2008	2	1.0	1.0
2008	9	11	2008	2	1.0	1.0	2008	10	11	2008	2	1.0	1.0	2008	11	11	2008	2	1.0	1.0
2008	9	12	2008	2	1.0	1.0	2008	10	12	2008	2	1.0	1.0	2008	11	12	2008	2	1.0	1.0
2008	9	13	2008	2	1.0	1.0	2008	10	13	2008	2	1.0	1.0	2008	11	13	2008	2	1.0	1.0
2008	9	14	2008	2	1.0	1.0	2008	10	14	2008	2	1.0	1.0	2008	11	14	2008	2	1.0	1.0
2008	9	15	2008	2	1.0	1.0	2008	10	15	2008	2	1.0	1.0	2008	11	15	2008	2	1.0	1.0
2008	9	16	2008	2	1.0	1.0	2008	10	16	2008	2	1.0	1.0	2008	11	16	2008	2	1.0	1.0
2008	9	17	2008	2	1.0	1.0	2008	10	17	2008	2	1.0	1.0	2008	11	17	2008	2	1.0	1.0
2008	9	18	2008	2	1.0	1.0	2008	10	18	2008	2	1.0	1.0	2008	11	18	2008	2	1.0	1.0
2008	9	19	2008	2	1.0	1.0	2008	10	19	2008	2	1.0	1.0	2008	11	19	2008	2	1.0	1.0
2008	9	20	2008	2	1.0	1.0	2008	10	20	2008	2	1.0	1.0	2008	11	20	2008	2	1.0	1.0
2008	9	21	2008	2	1.0	1.0	2008	10	21	2008	2	1.0	1.0	2008	11	21	2008	2	1.0	1.0
2008	9	22	2008	2	1.0	1.0	2008	10	22	2008	2	1.0	1.0	2008	11	22	2008	2	1.0	1.0
2008	9	23	2008	2	1.0	1.0	2008	10	23	2008	2	1.0	1.0	2008	11	23	2008	2	1.0	1.0
2008	9	24	2008	2	1.0	1.0	2008	10	24	2008	2	1.0	1.0	2008	11	24	2008	2	1.0	1.0
2008	9	25	2008	2	1.0	1.0	2008	10	25	2008	2	1.0	1.0	2008	11	25	2008	2	1.0	1.0
2008	9	26	2008	2	1.0	1.0	2008	10	26	2008	2	1.0	1.0	2008	11	26	2008	2	1.0	1.0
2008	9	27	2008	2	1.0	1.0	2008	10	27	2008	2	1.0	1.0	2008	11	27	2008	2	1.0	1.0
2008	9	28	2008	2	1.0	1.0	2008	10	28	2008	2	1.0	1.0	2008	11	28	2008	2	1.0	1.0
2008	9	29	2008	2	1.0	1.0	2008	10	29	2008	2	1.0	1.0	2008	11	29	2008	2	1.0	1.0
2008	9	30	2008	2	1.0	1.0	2008	10	30	2008	2	1.0	1.0	2008	11	30	2008	2	1.0	1.0
2008	10	1	2008	3	1.0	1.0	2008	11	1	2008	3	1.0	1.0	2008	12	1	2008	3	1.0	1.0
2008	10	2	2008	3	1.0	1.0	2008	11	2	2008	3	1.0	1.0	2008	12	2	2008	3	1.0	1.0
2008	10	3	2008	3	1.0	1.0	2008	11	3	2008	3	1.0	1.0	2008	12	3	2008	3	1.0	1.0
2008	10	4	2008	3	1.0	1.0	2008	11	4	2008	3	1.0	1.0	2008	12	4	2008	3	1.0	1.0
2008	10	5	2008	3	1.0	1.0	2008	11</												



## Hourly Capacity Pattern 20 (continued)

Cap				OM				Cap				OM				Cap				OM							
Yr	Prd	Day	Hr	Multiplier	Cap	OM	Yr	Prd	Day	Hr	Multiplier	Cap	OM	Yr	Prd	Day	Hr	Multiplier	Cap	OM	Yr	Prd	Day	Hr	Multiplier	Cap	OM
2005	1	1	1	1.0	1.0	1.0	2008	10	18	1	0.0	0.0	1.0	2008	11	1	1	1.0	1.0	1.0	2008	11	1	1	1.0	1.0	1.0
2005	2	2	2	1.0	1.0	1.0	2008	10	19	2	1.0	1.0	1.0	2008	11	2	2	1.0	1.0	1.0	2008	11	2	2	1.0	1.0	1.0
2005	3	3	3	1.0	1.0	1.0	2008	10	20	3	2.0	2.0	1.0	2008	11	3	3	2.0	2.0	1.0	2008	11	3	3	2.0	2.0	1.0
2005	4	4	4	1.0	1.0	1.0	2008	10	21	4	3.0	3.0	1.0	2008	11	4	4	3.0	3.0	1.0	2008	11	4	4	3.0	3.0	1.0
2005	5	5	5	1.0	1.0	1.0	2008	10	22	5	4.0	4.0	1.0	2008	11	5	5	4.0	4.0	1.0	2008	11	5	5	4.0	4.0	1.0
2005	6	6	6	1.0	1.0	1.0	2008	10	23	6	5.0	5.0	1.0	2008	11	6	6	5.0	5.0	1.0	2008	11	6	6	5.0	5.0	1.0
2005	7	7	7	1.0	1.0	1.0	2008	10	24	7	6.0	6.0	1.0	2008	11	7	7	6.0	6.0	1.0	2008	11	7	7	6.0	6.0	1.0
2005	8	8	8	1.0	1.0	1.0	2008	10	25	8	7.0	7.0	1.0	2008	11	8	8	7.0	7.0	1.0	2008	11	8	8	7.0	7.0	1.0
2005	9	9	9	1.0	1.0	1.0	2008	10	26	9	8.0	8.0	1.0	2008	11	9	9	8.0	8.0	1.0	2008	11	9	9	8.0	8.0	1.0
2005	10	10	10	1.0	1.0	1.0	2008	10	27	10	9.0	9.0	1.0	2008	11	10	10	9.0	9.0	1.0	2008	11	10	10	9.0	9.0	1.0
2005	11	11	11	1.0	1.0	1.0	2008	10	28	11	10.0	10.0	1.0	2008	11	11	11	10.0	10.0	1.0	2008	11	11	11	10.0	10.0	1.0
2005	12	12	12	1.0	1.0	1.0	2008	10	29	12	11.0	11.0	1.0	2008	11	12	12	11.0	11.0	1.0	2008	11	12	12	11.0	11.0	1.0
2005	13	13	13	1.0	1.0	1.0	2008	10	30	13	12.0	12.0	1.0	2008	11	13	13	12.0	12.0	1.0	2008	11	13	13	12.0	12.0	1.0
2005	14	14	14	1.0	1.0	1.0	2008	10	31	14	13.0	13.0	1.0	2008	11	14	14	13.0	13.0	1.0	2008	11	14	14	13.0	13.0	1.0
2005	15	15	15	1.0	1.0	1.0	2008	10	32	15	14.0	14.0	1.0	2008	11	15	15	14.0	14.0	1.0	2008	11	15	15	14.0	14.0	1.0
2005	16	16	16	1.0	1.0	1.0	2008	10	33	16	15.0	15.0	1.0	2008	11	16	16	15.0	15.0	1.0	2008	11	16	16	15.0	15.0	1.0
2005	17	17	17	1.0	1.0	1.0	2008	10	34	17	16.0	16.0	1.0	2008	11	17	17	16.0	16.0	1.0	2008	11	17	17	16.0	16.0	1.0
2005	18	18	18	1.0	1.0	1.0	2008	10	35	18	17.0	17.0	1.0	2008	11	18	18	17.0	17.0	1.0	2008	11	18	18	17.0	17.0	1.0
2005	19	19	19	1.0	1.0	1.0	2008	10	36	19	18.0	18.0	1.0	2008	11	19	19	18.0	18.0	1.0	2008	11	19	19	18.0	18.0	1.0
2005	20	20	20	1.0	1.0	1.0	2008	10	37	20	19.0	19.0	1.0	2008	11	20	20	19.0	19.0	1.0	2008	11	20	20	19.0	19.0	1.0
2005	21	21	21	1.0	1.0	1.0	2008	10	38	21	20.0	20.0	1.0	2008	11	21	21	20.0	20.0	1.0	2008	11	21	21	20.0	20.0	1.0
2005	22	22	22	1.0	1.0	1.0	2008	10	39	22	21.0	21.0	1.0	2008	11	22	22	21.0	21.0	1.0	2008	11	22	22	21.0	21.0	1.0
2005	23	23	23	1.0	1.0	1.0	2008	10	40	23	22.0	22.0	1.0	2008	11	23	23	22.0	22.0	1.0	2008	11	23	23	22.0	22.0	1.0
2005	24	24	24	1.0	1.0	1.0	2008	10	41	24	23.0	23.0	1.0	2008	11	24	24	23.0	23.0	1.0	2008	11	24	24	23.0	23.0	1.0
2005	25	25	25	1.0	1.0	1.0	2008	10	42	25	24.0	24.0	1.0	2008	11	25	25	24.0	24.0	1.0	2008	11	25	25	24.0	24.0	1.0
2005	26	26	26	1.0	1.0	1.0	2008	10	43	26	25.0	25.0	1.0	2008	11	26	26	25.0	25.0	1.0	2008	11	26	26	25.0	25.0	1.0
2005	27	27	27	1.0	1.0	1.0	2008	10	44	27	26.0	26.0	1.0	2008	11	27	27	26.0	26.0	1.0	2008	11	27	27	26.0	26.0	1.0
2005	28	28	28	1.0	1.0	1.0	2008	10	45	28	27.0	27.0	1.0	2008	11	28	28	27.0	27.0	1.0	2008	11	28	28	27.0	27.0	1.0
2005	29	29	29	1.0	1.0	1.0	2008	10	46	29	28.0	28.0	1.0	2008	11	29	29	28.0	28.0	1.0	2008	11	29	29	28.0	28.0	1.0
2005	30	30	30	1.0	1.0	1.0	2008	10	47	30	29.0	29.0	1.0	2008	11	30	30	29.0	29.0	1.0	2008	11	30	30	29.0	29.0	1.0
2005	31	31	31	1.0	1.0	1.0	2008	10	48	31	30.0	30.0	1.0	2008	11	31	31	30.0	30.0	1.0	2008	11	31	31	30.0	30.0	1.0
2005	32	32	32	1.0	1.0	1.0	2008	10	49	32	31.0	31.0	1.0	2008	11	32	32	31.0	31.0	1.0	2008	11	32	32	31.0	31.0	1.0
2005	33	33	33	1.0	1.0	1.0	2008	10	50	33	32.0	32.0	1.0	2008	11	33	33	32.0	32.0	1.0	2008	11	33	33	32.0	32.0	1.0
2005	34	34	34	1.0	1.0	1.0	2008	10	51	34	33.0	33.0	1.0	2008	11	34	34	33.0	33.0	1.0	2008	11	34	34	33.0	33.0	1.0
2005	35	35	35	1.0	1.0	1.0	2008	10	52	35	34.0	34.0	1.0	2008	11	35	35	34.0	34.0	1.0	2008	11	35	35	34.0	34.0	1.0
2005	36	36	36	1.0	1.0	1.0	2008	10	53	36	35.0	35.0	1.0	2008	11	36	36	35.0	35.0	1.0	2008	11	36	36	35.0	35.0	1.0
2005	37	37	37	1.0	1.0	1.0	2008	10	54	37	36.0	36.0	1.0	2008	11	37	37	36.0	36.0	1.0	2008	11	37	37	36.0	36.0	1.0
2005	38	38	38	1.0	1.0	1.0	2008	10	55	38	37.0	37.0	1.0	2008	11	38	38	37.0	37.0	1.0	2008	11	38	38	37.0	37.0	1.0
2005	39	39	39	1.0	1.0	1.0	2008	10	56	39	38.0	38.0	1.0	2008	11	39	39	38.0	38.0	1.0	2008	11	39	39	38.0	38.0	1.0
2005	40	40	40	1.0	1.0	1.0	2008	10	57	40	39.0	39.0	1.0	2008	11	40	40	39.0	39.0	1.0	2008	11	40	40	39.0	39.0	1.0
2005	41	41	41	1.0	1.0	1.0	2008	10	58	41	40.0	40.0	1.0	2008	11	41	41	40.0	40.0	1.0	2008	11	41	41	40.0	40.0	1.0
2005	42	42	42	1.0	1.0	1.0	2008	10	59	42	41.0	41.0	1.0	2008	11	42	42	41.0	41.0	1.0	2008	11	42	42	41.0	41.0	1.0
2005	43	43	43	1.0	1.0	1.0	2008	10	60	43	42.0	42.0	1.0	2008	11	43	43	42.0	42.0	1.0	2008	11	43	43	42.0	42.0	1.0
2005	44	44	44	1.0	1.0	1.0	2008	10	61	44	43.0	43.0	1.0	2008	11	44	44	43.0	43.0	1.0	2008	11	44	44	43.0	43.0	1.0
2005	45	45	45	1.0	1.0	1.0	2008	10	62	45	44.0	44.0	1.0	2008	11	45	45	44.0	44.0	1.0	2008	11	45	45	44.0	44.0	1.0
2005	46	46	46	1.0	1.0	1.0	2008	10	63	46	45.0	45.0	1.0	2008	11	46	46	45.0	45.0	1.0	2008	11	46	46	45.0	45.0	1.0
2005	47	47	47	1.0	1.0	1.0	2008	10	64	47	46.0	46.0	1.0	2008	11	47	47	46.0	46.0	1.0	2008	11	47	47	46.0	46.0	1.0
2005	48	48	48	1.0	1.0	1.0	2008	10	65	48	47.0	47.0	1.0	2008	11	48	48	47.0	47.0	1.0	2008	11	48	48	47.0	47.0	1.0
2005	49	49	49	1.0	1.0	1.0	2008	10	66	49	48.0	48.0	1.0	2008	11	49	49	48.0	48.0	1.0	2008	11	49	49	48.0	48.0	1.0
2005	50	50	50	1.0	1.0	1.0	2008	10	67	50	49.0	49.0	1.0	2008	11	50	50	49.0	49.0	1.0	2008	11	50	50	49.0	49.0	1.0
2005	51	51	51	1.0	1.0	1.0	2008	10	68	51	50.0	50.0	1.0	2008	11	51	51	50.0	50.0	1.0	2008	11	51	51	50.0	50.0	1.0
2005	52	52	52	1.0	1.0	1.0	2008	10	69	52	51.0	51.0	1.0	2008	11	52	52	51.0	51.0	1.0	2008	11	52	52	51.0	51.0	1.0
2005	53	53	53	1.0	1.0	1.0	2008	10	70	53	52.0	52.0	1.0	2008	11	53	53	52.0	52.0	1.0	2008	11	53	53	52.0	52.0	1.0
2005	54	54	54	1.0	1.0	1.0	2008	10	71	54	53.0	53.0	1.0	2008	11	54	54	53.0	53.0	1.0	2008	11	54	54	53.0	53.0	1.0
2005	55	55	55	1.0	1.0	1.0	2008	10																			



Hourly Capacity Pattern 20 (continued)

Yr	Prd	Start Day	Start Hr	Cap Multiplier	OM Multiplier	Yr	Prd	Start Day	Start Hr	Cap Multiplier	OM Multiplier
2008	11	24	22	1.0	1.0	2008	11	24	22	1.0	1.0
2008	11	24	23	1.0	1.0	2008	11	24	23	1.0	1.0
2008	11	24	24	1.0	1.0	2008	11	24	24	1.0	1.0
2008	11	24	25	1.0	1.0	2008	11	24	25	1.0	1.0
2008	11	24	26	1.0	1.0	2008	11	24	26	1.0	1.0
2008	11	24	27	1.0	1.0	2008	11	24	27	1.0	1.0
2008	11	24	28	1.0	1.0	2008	11	24	28	1.0	1.0
2008	11	24	29	1.0	1.0	2008	11	24	29	1.0	1.0
2008	11	24	30	1.0	1.0	2008	11	24	30	1.0	1.0
2008	11	24	31	1.0	1.0	2008	11	24	31	1.0	1.0
2008	11	24	32	1.0	1.0	2008	11	24	32	1.0	1.0
2008	11	24	33	1.0	1.0	2008	11	24	33	1.0	1.0
2008	11	24	34	1.0	1.0	2008	11	24	34	1.0	1.0
2008	11	24	35	1.0	1.0	2008	11	24	35	1.0	1.0
2008	11	24	36	1.0	1.0	2008	11	24	36	1.0	1.0
2008	11	24	37	1.0	1.0	2008	11	24	37	1.0	1.0
2008	11	24	38	1.0	1.0	2008	11	24	38	1.0	1.0
2008	11	24	39	1.0	1.0	2008	11	24	39	1.0	1.0
2008	11	24	40	1.0	1.0	2008	11	24	40	1.0	1.0
2008	11	24	41	1.0	1.0	2008	11	24	41	1.0	1.0
2008	11	24	42	1.0	1.0	2008	11	24	42	1.0	1.0
2008	11	24	43	1.0	1.0	2008	11	24	43	1.0	1.0
2008	11	24	44	1.0	1.0	2008	11	24	44	1.0	1.0
2008	11	24	45	1.0	1.0	2008	11	24	45	1.0	1.0
2008	11	24	46	1.0	1.0	2008	11	24	46	1.0	1.0
2008	11	24	47	1.0	1.0	2008	11	24	47	1.0	1.0
2008	11	24	48	1.0	1.0	2008	11	24	48	1.0	1.0
2008	11	24	49	1.0	1.0	2008	11	24	49	1.0	1.0
2008	11	24	50	1.0	1.0	2008	11	24	50	1.0	1.0
2008	11	24	51	1.0	1.0	2008	11	24	51	1.0	1.0
2008	11	24	52	1.0	1.0	2008	11	24	52	1.0	1.0
2008	11	24	53	1.0	1.0	2008	11	24	53	1.0	1.0
2008	11	24	54	1.0	1.0	2008	11	24	54	1.0	1.0
2008	11	24	55	1.0	1.0	2008	11	24	55	1.0	1.0
2008	11	24	56	1.0	1.0	2008	11	24	56	1.0	1.0
2008	11	24	57	1.0	1.0	2008	11	24	57	1.0	1.0
2008	11	24	58	1.0	1.0	2008	11	24	58	1.0	1.0
2008	11	24	59	1.0	1.0	2008	11	24	59	1.0	1.0
2008	11	24	60	1.0	1.0	2008	11	24	60	1.0	1.0



# MECO Calibration Factor Report

Year 2008

Appendix A Workpapers

Page 75 of 75

## Table A-3 Year 2008 Annual Production Report

Kahului Power Plant											
	[MX001] Gross KWH Generation	[MX004] Less Station Use	[MX001] Net KWH Generation	[MX011] Barrels Consumed	Fuel Oil Cost	Fuel Oil Handling Address	Total Fuel Cost	[MX001] MBTUS Consumed	MBTU Per Net KWH	Cost/MBTU	
JAN	17,770,600	927,940	16,842,660	38,664.28	3,347,661.43	19,107.07	3,366,768.50	243,584.95	14,462.38	1,382.17	
FEB	17,054,600	842,960	16,211,640	36,562.35	3,259,292.04	18,138.32	3,277,430.36	230,342.79	14,208.48	1,422.87	
MAR	16,465,400	813,630	15,651,770	35,289.84	2,999,587.05	19,029.57	3,018,616.62	222,336.90	14,204.53	1,357.74	
APR	14,133,600	707,380	13,426,220	30,044.93	2,440,592.94	17,930.47	2,468,523.41	189,383.08	14,098.02	1,303.09	
MAY	19,206,400	948,090	18,258,310	41,197.66	3,587,590.35	18,191.43	3,605,781.78	259,520.04	14,167.25	1,389.40	
JUN	12,355,300	654,460	11,700,840	27,424.90	2,416,092.39	17,669.58	2,433,761.97	172,776.86	14,366.19	1,408.62	
JUL	14,551,600	780,160	13,771,440	32,565.64	3,010,494.31	2,780.39	3,013,274.70	205,163.50	14,897.75	1,468.72	
AUG	20,157,900	1,076,380	19,081,520	43,937.01	4,551,627.86	19,508.91	4,571,136.77	276,803.14	14,506.35	1,651.40	
SEP	20,120,600	1,045,090	19,075,510	43,858.51	5,101,534.64	21,228.73	5,122,763.37	276,308.64	14,484.99	1,854.00	
OCT	21,262,500	1,077,910	20,184,590	46,436.27	5,589,547.85	38,130.82	5,627,678.67	292,548.51	14,493.66	1,923.67	
NOV	21,349,400	1,070,170	20,279,230	47,150.05	5,029,297.88	1,617.79	5,030,915.67	297,045.32	14,647.76	1,693.65	
DEC	19,543,900	1,062,140	18,481,760	42,576.63	3,767,091.98	39,539.48	3,806,631.46	266,232.75	14,466.41	1,417.29	
YTD	214,031,800	10,946,310	203,085,490	465,704.06	45,103,400.72	232,912.56	45,336,313.28	2,933,935.58	14,446.80	1,545.24	

Maui Power Plant											
	[MX001] Gross KWH Generation	[MX004] Less Station Use	[MX001] Net KWH Generation	[MX011] Barrels Consumed	Diesel Cost	Diesel for Startup	Diesel for Testing	[MX011] MBTUS Consumed	MBTU Per Net KWH	Cost/MBTU	Maui Heat Rate
JAN	68,277,616	2,580,800	65,696,816	103,968.03	12,719,683.34	23,342.31	609,252.62	609,252.62	9,259.61	2,091.58	10,319.98
FEB	71,454,840	2,492,180	68,962,660	107,162.44	12,908,262.54	21,890.52	627,971.90	627,971.90	9,105.97	2,059.03	10,077.16
MAR	77,760,312	2,761,040	74,999,272	119,080.01	14,267,849.04	9,631.44	697,808.84	697,808.84	9,304.21	2,046.04	10,150.30
APR	74,814,516	2,667,520	72,146,996	112,228.90	14,031,370.26	38,606.76	657,661.34	657,661.34	9,115.57	2,119.40	9,897.31
MAY	73,478,576	2,739,880	70,738,696	109,988.92	15,671,626.28	23,108.49	644,535.05	644,535.05	9,111.49	2,435.05	10,151.42
JUN	78,364,560	2,797,180	75,567,380	118,312.71	17,935,590.84	25,109.46	693,312.45	693,312.45	9,174.76	2,590.56	9,924.45
JUL	82,048,922	2,982,620	79,066,302	122,606.34	20,252,773.20	41,020.32	718,473.17	718,473.17	9,086.97	2,824.57	9,948.94
AUG	70,555,121	2,723,120	67,832,001	106,172.24	18,761,197.62	44,604.34	622,169.33	622,169.33	9,122.21	3,022.62	10,343.30
SEP	69,123,478	2,583,760	66,539,718	104,065.03	17,854,698.82	44,858.88	609,821.06	609,821.06	9,164.77	2,935.21	10,350.14
OCT	71,395,488	2,624,680	68,770,808	107,977.74	16,367,253.08	55,969.03	632,749.57	632,749.57	9,290.83	2,595.53	10,401.81
NOV	66,209,074	2,428,480	63,780,594	103,960.57	14,730,156.11	33,423.62	609,208.97	609,208.97	9,551.64	2,429.97	10,781.06
DEC	71,761,901	2,579,600	69,182,301	112,026.00	13,670,409.35	78,579.68	658,472.33	658,472.33	9,489.02	2,094.37	10,541.07
YTD	875,344,404	31,860,780	843,483,624	1,327,548.91	189,210,870.48	440,144.85	7,779,436.63	7,779,436.63	9,274.08	2,437.85	10,237.64

\*Includes Bar